

Established 1840.

THE

Sixty-Ninth Year.

Southern Planter

A MONTHLY JOURNAL

DEVOTED TO

Practical and Progressive Agriculture, Horticulture,
Trucking, Live Stock and the Fireside.

OFFICE: 28 NORTH NINTH STREET, RICHMOND, VIRGINIA.

THE SOUTHERN PLANTER PUBLISHING COMPANY.
J. F. JACKSON, Editor.

Proprietors.

Vol. 69

FEBRUARY, 1908.

No. 2.

CONTENTS.

Our Subscription Campaign.....	99
FARM MANAGEMENT—	
Editorial—Work for the Month.....	100
Editorial—How to Make Farm Yard Manure More Valuable as a Crop Producer.....	103
Two Southern Farms.....	104
Alfalfa.....	106
Crop Rotation Again.....	107
Factors Affecting the Corn Crop.....	108
Soil Fertility.....	110
Apple Record for an Albemarle Orchard.....	111

TRUCKING, GARDEN AND ORCHARD—

Editorial—Work for the Month.....	112
The Scuppernong Grape.....	113
Strawberry Growing in Alabama.....	113
Peach Growing in Virginia.....	113
Small Canneries on the Farm.....	114
Tomato Growing.....	114
The Virginia State Horticultural Society.....	116
Professor Massey's New Book, "Practical Farm- ing".....	116

LIVE STOCK AND DAIRY—

The Hygeia Herd of Holstein-Friesians.....	117
Pyaemic Arthritis.....	118
Colantha 4th's Johanna—Queen of All Dairy Cows.....	119
Virginia State Dairymen's Association.....	120

THE POULTRY YARD—

Poultry Notes.....	121
Better Prices for Poultry.....	122
Poultry Keeping on a Half-Acre Lot in a City.....	124
The White Wyandotte.....	124
Animal Show Virginia Poultry Association.....	124
List of Awards.....	148
A Magnificent Industry.....	125

THE HORSE—

Notes.....	126
------------	-----

MISCELLANEOUS—

The New Director of the Virginia Experiment Station	127
The Work of the Agricultural School in the Scheme of State Education.....	127
The University of Virginia and the V. P. I.....	139
Enquirers' Column (Detail Index p. 188).....	171
Advertisements	131

SUBSCRIPTION, 50c. PER YEAR, IN ADVANCE.

Merchandise from Sheriffs' and Receivers' Sales

30 to 50 Per Cent Saved on Staple Merchandise

OUR WONDERFUL 1908 OFFER

Wrecking prices are known as bargain prices. The most wonderful bargain offering ever advertised. Such an opportunity seldom occurs. The very best manufactured articles are being offered at less than original cost of production. We do not buy our

Chicago House Wrecking Co.

You Must Buy at These Astonishingly Low Prices. Don't Wait Until it is too Late. Send Us Your Order Today.

JACK-SCREWS, 95c.

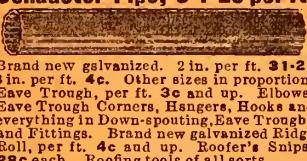
Our Jacks are hand new, best quality manufactured. Made with cast iron stand and wrought iron screw having deep cut threads.



10 Ton Jack Screw.....	\$.95
12 " " " "	1.21
16 " " " "	1.42
20 " " " "	1.90
24 " " " "	2.52

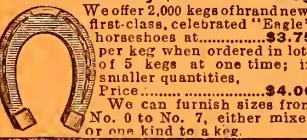
House Raising Jacks, each, 1.55
Maple Rollers, each, .20
Single Tackle Blocks, .23
Double " " .39
Triple " " .53
All kinds House moving equipment

Conductor Pipe, 3 1-2c per ft.



Brand new galvanized, 2 in. per ft. 3 1-2c
3 in. per ft. 4c. Other sizes in proportion.
Eave Trough, per ft. 3c and up. Elbows,
Eave Trough Corners, Hangers, Hooks and
everything in Down-spouting, Eave Troughs
and Fittings. Brand new galvanized Ridge
Roll, per ft. 4c and up. Roofers' Snips,
28c each. Roofing tools of all sorts.

HORSE SHOES, \$3.75 Per Keg



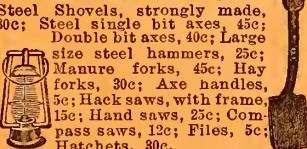
We offer 2,000 kegs of brand new, first-class, celebrated "Eagle" horseshoes at.....\$3.75 per keg when ordered in lots of 5 kegs at one time; in smaller quantities, 1 keg.....\$4.00 We can furnish sizes from No. 0 to No. 7, either mixed or one kind to a keg.

Felt Roofing 60c pr. Sq.



2-ply "Eagle" Brand, 100 sq. ft., 60c; 3-ply, 90c. Vulcanite Roofing with nails, caps and cement, easy to put on; requires no coating, 108 sq. ft., \$1.75. Rubberized Galvo-Roofing, guaranteed for 20 years. No coating required; per 108 sq. ft., including nails, caps, cement for laps, 1 ply \$1.35.

TUBULAR LANTERNS, 45c.



Steel Shovels, strongly made, 30c; Steel single bit axes, 45c; Double bit axes, 40c; Large size steel hammers, 25c; Manure forks, 45c; Hay forks, 30c; Axe handles, 5c; Hack saws, with frame, 15c; Hand saws, 25c; Compass saws, 12c; Files, 5c; Hatchets, 30c.

100 Lbs. FENCING WIRE \$1.25



PORTABLE FORGE, \$4.75.



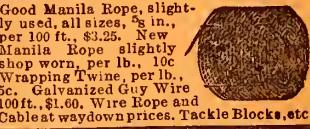
Lever motion; with extra heavy pipe legs; stands 30 in. high; 8 in. fan. Larger forges like illustration from \$6.35 to \$14.50. We guarantee our forges equal or superior to anything on the market. Write for our full list. Blacksmiths' sledges, unhandled, per lb., 5c. Hot and Cold Chisels, 9c per lb.

PAINTS, 30c PER GALLON



Barn Paint, in bbl. lots, per gal., 30c; Cold Water Paints, celebrated Ashestine brand, outside use, fully guaranteed, best assortment colors, 50 lb., lots, per lb., 3c. "Perfection" Mixed Paints, per gal., 75c. Premier's Brand, 3-year guarantee, per gal., 95c. Varnishes.

MANILA ROPE BARGAINS.



Good Manila Rope, slightly used, all sizes, 2c in. per 100 ft., \$3.25. New Manila Rope slightly shop worn, per lb., 10c. Wrapping Twine, per lb., 5c. Galvanized Guy Wire 100ft., \$1.60. Wire Rope and Cable at waydown prices. Tackle Blocks, etc.

100 Lbs. FENCING WIRE \$1.25



No. 14 Painted Wire shorts.....\$1.25
Nos. 9, 10, 11 and 12 Galvanized shorts.....\$1.80
Nos. 14 and 15.....\$1.90
Galvanized Wire continuous lengths, No. 9 per 100 lbs.....\$2.25
No. 7.....\$1.80
EE wire.....\$1.80
No. 14.....\$3.10
per 100 lbs.....\$2.85
Telephone equipment, Fence wire all kinds.

Steel Roofing Per 100 Sq. Ft. \$1.50



Most economical and durable roof covering known. Easy to put on; requires no tools but a hatchet or a hammer. With ordinary care will last many years. Thousands of satisfied customers everywhere have purchased our roofing. Suitable for covering buildings of any kind. Also used for ceilings, additions. Fire-proof and water-proof. Cheaper and more lasting than shingles. Will not taint rain water. Makes your building cooler in summer and warmer in winter. Absolutely perfect, brand new, straight from the factory. \$1.50 is our price for our No. 15 grade of Flat Semi-Hardened steel roofing and siding, each sheet 24 in. wide and 24 in. long. Our price on the corrugated, like illustration, sheets 22 in. wide and 24 in. long, \$1.75. At 25 cents per square additional we will furnish sheets 6 and 8 feet long. Our price on Standing Seam or "V" Crimped Roofing is the same as on the corrugated. We have other grades of Steel and Iron Roofing. Don't Delay. Write TODAY for Full Particulars.

We Pay the Freight

to all points East of Colorado except Oklahoma, Texas and Indian Territory. Quotations to other points on application. This freight prepaid proposition only refers to the steel roofing offered in this advertisement. Satisfaction guaranteed or money refunded. We will send this roofing to anyone answering this advertisement C. O. D., with privilege of examination if you will send 25 per cent of the amount you order in cash; balance to be paid after material reaches your station. If not found as represented, refuse the shipment and we will cheerfully refund your deposit. All kinds of Roofing supplies, galvanized conductor pipe, eave trough, steel snips, fittings, etc. Send us your order today.

Sold under Binding Guarantee.

THIS WONDERFUL BARGAIN BOOK is just out and ready to be sent to you at once. It is a book as every shrewd buyer must have, 500 pages with thousands of items of the very best merchandise and supplies bought by us at Sheriffs' and Receivers' Sales. It will pay you to keep it handy. 1 pages contain a full record of what we still have on hand from the wonderful St. Louis World's Fair Merchandise, machinery and supplies, articles for everyone. You will find it useful in the home, the field, in the workshop or in the office. Write us today.

Cut out this "Ad" mark a cross on those items that most interest you and we will send you much valuable information. Also fill in Free Catalog coupon attached on our new catalog will be sent you absolutely free and prepaid. If you do not want cut out the "Ad" send us your name and address correctly, tell us where you have seen this "Ad" also tell us just what items in our "Ad" interest you most. Address

Chicago House Wrecking Co.

goods in the regular way, but take advantage of various sales to secure bargains. Our mammoth plant is the largest in the world devoted to the sale of general stocks. Over 35 acres literally covered with merchandise.

You Must Buy at These Astonishingly Low Prices. Don't Wait Until it is too Late. Send Us Your Order Today.

Special Furniture Catalog FREE.

We are constantly purchasing at Sheriffs' and Receivers' Sales complete stocks of high grade, brand new, up-to-date Furniture, Carpets, Rugs and Linoleum. We can save you from 30 to 60 per cent. Good Linoleum at 30c per sq. yd. Rugs from \$1.50 up. Bedroom Furniture, Office Fixtures, Store Fixtures, etc. We can furnish everything needed for the home or the office.

Send us list of your requirements or ask for our Special Furniture Catalog.

FIELD FENCING, 20c per rod.

Galvanized graduated diamond mesh field fencing, 22 in. high, per rod.....20c

30 in. per rod.....35c

Square mesh fencing at the same prices.

Heavy 2-in. mesh, hexagon galvanized fencing, suitable for every purpose, made of No. 16 wire, 150 linear feet 24 in. wide, per bale.....\$2.00

Galvanized poultry netting, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....50c

Calibrated wire mesh, 2-in. mesh, 150 linear feet to the bale; 12 in. wide, per bale.....

The Southern Planter.

DEVOTED TO

PRACTICAL AND PROGRESSIVE AGRICULTURE, HORTICULTURE,
TRUCKING, LIVE STOCK AND THE FIRESIDE.

Agriculture is the nursing mother of the Arts.—XENOPHON.
Tillage and pasture are the two breasts of the State.—SULLY.

69th Year.

Richmond, Va., February, 1908.

No. 2.

OUR SUBSCRIPTION CAMPAIGN.

With the opening month of the year, our subscription campaign has made great progress and we are adding names to our list with every mail. We are greatly gratified with the result and desire to thank our friends for the interest they are showing in our welfare. We desire, however, to impress once more upon the farmers of the South the importance of at once availing themselves of the liberal offers we are making. Whilst the Southern Planter alone, at the price of fifty cents, is one of the best investments they can make in their own interest, yet when it can be had in connection with the other papers we offer at the prices named below, we fail to see how any farmer can be so blind to the interest of himself and his family as not to avail himself of some or one of the offers. In the past Southern farmers have not been a reading people. They are gradually getting out of this category and are realizing that if they are to succeed as they ought to do and as they can do with proper knowledge and information, they must read and learn what the best farmers are doing and what the scientists are finding out for the benefit of agricultural progress. They have got to realize that they must use brains as well as muscle in the pursuit of their daily calling. In no way can they keep posted in the best way to conduct their business so as to realize the most profit but by reading the best agricultural literature and in the South this means the Southern Planter. This journal is published for the express purpose of bringing to the notice of Southern farmers everything which can possibly be of help to them and is edited with a special regard to the conditions affecting Southern agriculture and the best means of meeting these and making Southern farmers prosperous. That it has met and is meeting the requirements of Southern farmers is evidenced by the constant testimony of these men to the benefit they have derived and the help they have received from it. For nearly seventy years it has gone from this office to the farmers of the South and we never open a mail without finding testi-

monials commanding the Southern Planter. We want each of our readers to make it his business to mention the Southern Planter to his neighbors and friends and ask them to join with him in subscribing for it. This results in a saving to all parties.

For one dollar you can have the Planter one year for yourself and two friends not already subscribers, or you can secure it for yourself alone for three years. In addition to this liberal offer you can avail yourself of any of the following offers:

One dollar pays for the Southern Planter and Weekly Times-Dispatch one year.

One dollar pays for the Southern Planter and your county paper (if it is a \$1 paper) one year.

Fifty cents pays for the Southern Planter and Farm and Fireside one year.

Fifty cents pays for the Southern Planter and Industrious Hen one year.

We wish also to repeat that we do not wish or expect our friends to work for us for nothing. It is to their financial advantage to avail themselves of one of the various clubbing offers and we will make it worth while to them if they will act as agents. Simply write for terms and samples.

Clubbing Arrangements With Other Magazines and Journals.

We have secured terms with publishers of the leading popular magazines and journals and with publishers of the leading newspapers in all the great cities whereby we are enabled to supply them in connection with the Southern Planter at prices considerably less than the published prices. In most cases we can supply them at such a price as will give the Planter free. In this issue will be found a clubbing list giving the prices of those journals and magazines which are mostly called for. If you do not find the magazine, newspaper or journal which you desire on that list write us and we will quote you on what you desire.

Farm Management.

WORK FOR THE MONTH.

The opening month of the year has been, to this writing, mild and characterized by an absence of severe frost and wintry weather, especially in the middle and eastern sections of the Southern States. Even in the mountains of the western sections, whilst there has been some snow and frost, these have not been so severe or heavy as often characterize those parts at this season of the year. We have had one or two heavy rains that have caused the rivers to overflow the lowlands for a few days, but no exceptionally disastrous floods have occurred, and the uplands have been most of the time in condition to be ploughed and got ready for crops. With such an opportunity to utilize the teams in preparing for the cropping season, it is a reflection upon our farmers to see so little of the land ploughed. With comparatively few exceptions, farmers will not utilize the winter months as they ought to do. Having secured the last year's crop, they largely waste the time when they might be preparing the land for the next crops and thus put themselves in the same position as the Northern and Western farmers, who are prevented by the frost and snow from "taking time by the forelock" and preparing for another season's crops. In this way the Southern farmer makes of his farm a one-crop-in-the-year farm, when it ought to be, in most cases, a two-crop farm, and can, in many cases, be made a three-crop-in-the-year farm. We have often discussed this subject with farmers and urged a change in the system, but it is hard to convince them of the feasibility of it. With some we have succeeded, and they would not now go back to the old system. With the same team they can readily work nearly twice as much land and secure much greater average crops. Land left unploughed and uncovered with a crop in the South during the winter loses almost as much fertility as it does whilst producing a crop in the summer. If it has no fall crop seeded on it the land should be ploughed and cultivated at every opportunity in order that the action of the sun, air and moisture may have free play in it and thus prepare the inert plant food to become available for the crop to be grown on it. The only way in which this plant food can be made available is by the breaking of the soil into fine particles, and by breaking it deeply so that it will hold the rainfall which will gradually dissolve the plant food and make a reserve of moisture for the use of the crop later in the season. Many of those who have adopted our advice on this subject have reported to us that they are now securing much heavier crops without the use of fertilizers than they formerly secured with fertilizer. They have got from ten to fifteen inches in depth of the soil finely broken and thus permeable to the air and moisture, and on these lands drouth seems to have no effect on the crops. They go on growing and keep a good color when the crops on shallow-ploughed land are withering away. If with this deep ploughing and frequent working a ton of lime per acre is worked into the land a sweet, mellow condition of the soil will be secured, which is favorable to the growth of microbic life in the

soil and upon this life more than upon the fertilizer used depends the success of the crop. Our soils are largely "dead soils," and whilst they continue in this condition, they will not be productive soils. Until the soils become alkaline through the use of lime, the needed microbic life cannot flourish and multiply. Once make the soil sweet in this way and then a light application of farm yard manure, even only one or two tons to the acre, will introduce microbic life and it will spread and multiply and cause a return in crop production out of all proportion to the quantity of plant food actually supplied by the manure. You cannot put this microbic life into the soil by the use of commercial fertilizers. They will supply plant food, but neither humus nor microbic life, and these two are the first essentials of a productive soil. There are thousands of acres of land in England that never had an ounce of commercial fertilizer on them which have been producing crops for hundreds of years which are to-day capable of producing thirty or forty bushels of wheat or three tons of hay to the acre and are doing so year after year. These lands are kept full of humus and microbic life by deep and perfect cultivation and the application of some manure, when producing grain and root crops, and then, when put into grass, make heavy hay crops and rich pastures. The proper time to commence this work of rejuvenating and renovating land is the winter when the land is dry enough to plough and work. At that season the team can do twice the work with less loss of flesh and strength and man himself is then capable of much more exertion with less fatigue. Do not delay any longer to commence this work of deep ploughing and breaking fine the land intended to be cropped. If you wait until the later spring months, land ploughed deep will not make satisfactory crops this year as the new soil turned up will not have time to become aerated and fitted to give up its plant food. When turning land deeper than it has been previously ploughed at this season of the year, the furrows should be set on edge and not turned entirely over. When set on edge, the subsequent working with the cultivator or harrow will mix the new and old soil much more completely and result in better returns than if the new soil rests on the top of the old. Do not plough the land when wet and never turn frozen soil or snow into the land.

Having decided upon the crops to be grown this year, the question as to where they should be planted should have careful consideration. This involves the whole question of crop rotation, a subject which has been under discussion in our columns for two or three months and which is further discussed in this issue. We are heartily in accord with our correspondents who insist on the importance of following every grain crop with a legume crop. There can be no question that the adoption of such a system will result in better crops and constantly increasing fertility of the land. It will also result in great saving in fertilizer bills, as the only kind required to be bought will be the mineral fertilizers, in most cases only

phosphoric acid, as with the use of lime the latent potash in the soil can be made available and this lime will insure a stand of the leguminous crops. These legumes are all large consumers of phosphoric acid, and it will almost certainly pay to give them help in this way until a high state of fertility has been secured. The reason for rotation of crops has hitherto largely rested on the principle that each crop has a special aptitude for some particular form of plant food and will deplete the soil of this and so render it unbalanced in its content of plant food. If the growing of the same crop year after year is persisted in, and the result of this unbalancing will be inability to produce other crops profitably. Whilst this theory is undoubtedly sustained largely by practice, yet there is now being advanced and sustained by observation and experiment a theory that each crop grown not only draws more largely on one form of plant food than another, but that it also exerts a toxic or poisonous influence on the soil in some way which has the effect of reducing the yield of a similar crop grown on the same land immediately in succession. This theory, which is strongly maintained by Professor Milton Whitney of the Bureau of Soils, to whose arguments in favor of it and of the further position that nearly all soils have a sufficient supply of plant food in their make up for the needs of all crops if only the same can be made available, a correspondent invites our attention with the remark that he is astounded at the contention, is the subject of much controversy amongst the scientists. When the position was first advanced by Professor Whitney and his colleagues, we were one of the few who took sides with him, at any rate, to the extent of agreeing that there was more in the contention than many scientists were willing to admit. We are still of the same opinion, and believe that on these lines there is yet to be worked out a system of crop production which will entirely change existing methods. Our practical work on the farm has convinced us that the reason why one crop will not continue to produce profitably grown continuously in succession is not explained by the old contention that it finds a lack of the particular plant food which it needs in excess, for we have provided this in abundance and yet failed to make a successful crop. This would seem to sustain the point that each crop produces or exudes some toxic property which interferes with successful growth of the same crop the following year. Professor Whitney's experiments seem to have still further demonstrated the truth of this position. The further contention that nearly all soils have a sufficient supply of plant food to produce profitable crops for an almost interminable series of years, if it can only be made available, is certainly supported by the analyses made of soils from nearly every section. These analyses show phosphoric acid and potash usually sufficient to supply the needs of crops for years and years to come. Knowing this to be a fact, it has always seemed to us an absurdity to say to an enquirer that in order to make successful growth he must add two hundred or three hundred pounds more of acid phosphate, or fifty to one hundred pounds of muriate of potash to the excessive supply already in the soil, and yet this is the one, answer which science and experimental work warrants us in giving up to the present

time. Professor Whitney and his colleagues are deserving of the support of all progressive farmers in the work they are doing, for we believe that sooner or later they or their successors will discover and demonstrate how we can make the latent fertility of the soil available and secure profitable crops without adding more of the same elements to nature's superabundance. We have already made some progress in this direction, for we now know that by using lime we can make the latent potash available and that this will enable us to grow the clovers and other legumes, and we now know that these legumes turned into the soil will make available unavailable phosphoric acid applied to the land in the form of undissolved South Carolina rock (floats), thus taking the place of the sulphuric acid used in making acid phosphate. Until, however, these problems are worked out and probably after they are resolved, rotation of crops must be followed if the best results are to be attained and we would therefore urge upon each farmer the importance of so pitching his crops as to provide for the best rotation possible on his land. In doing this he will derive much help from a study of the article on rotation in this and two preceding issues. For sandy, light loam and medium loams, a short rotation, say, of three or four years, is usually most profitable. On heavier loams and clays, a five, six, or seven year rotation is often the best, as these lands are more costly to work when under arable cultivation, and the recompense of this cost has to be got from the return made by the hay and pasture which are produced and saved with practically little cost. In connection with this question of rotation and the crops to be produced comes up the subject of the fertilizer that it will be necessary to purchase. We wish we could feel assured that upon every farm all the barn yard manure which it was possible to make had been made and saved since last summer and applied, as made, to the land to be cropped this year. If this has been done then even where only a comparatively small head of live stock has been kept there will have been added to the soil a large amount of plant food, and the consequent necessity for buying commercial fertilizer will have been greatly lessened. For the successful and profitable production of the staple crops, barn yard manure ought to be the fertilizer relied upon and commercial fertilizer only be used to supplement the deficiency. Where the whole reliance has to be put upon commercial fertilizer, whilst if properly selected or mixed to meet the requirements of the crop and land, it will often increase the yield, it is rarely that it results in profit when the cost of the fertilizer is charged against the increased production. For crops like tobacco, Irish potatoes and other truck crops, where the relative value of the product is high in comparison with the bulk produced, commercial fertilizers judiciously mixed to meet crop and soil requirements can be used profitably in an average season. In buying the commercial fertilizer required much more care ought to be exercised than is usually displayed. Too often the buyer knows nothing of the component parts of the fertilizer he purchases. He asks for somebody's "Crop Producer" or "Trucker's Friend," or some other high-sounding, titled brand, and if the dealer does not happen to have this, he takes what the dealer offers him and tells him is just as good. If

the farmer would only just remember what the chemist of the Department of Agriculture says in his report, that great numbers of these goods with high-sounding names are all filled into the bags out of one pile on the manufacturer's floor, he would not place such confidence in the names on the bags, but would look to see what the fertilizer is guaranteed to contain and would buy by the analysis and not by the name. Every one using fertilizers ought to send to the Virginia Experiment Station and get Bulletin 163, "Origin, Composition and Utility of Fertilizing Materials," and carefully read and study its contents and then he will know what to buy to meet his needs and will have this or none. As our readers well know, we never advise the use of fertilizers branded with certain names. We tell them what the crop needs and what chemicals will supply these needs, and in what proportions these should be mixed. If our readers would act on this advice and mix for themselves, they would save money and get fertilizers better suited to their requirements. If they did so they would not buy 2-8-2 goods which is the quality, of which we presume the largest quantity is sold, and apply it at the rate of two hundred or three hundred pounds to the acre. They would realize that to apply four to six pounds of nitrogen and the like quantity of potash to the acre, which is all that is supplied in two hundred pounds of this mixture is practically of no value whatever in the production of a crop and that the sole value derived from this mixture lies in the phosphoric acid, of which the two hundred pounds supplies sixteen pounds. Buying a plain acid phosphate, the buyer could afford to increase the phosphoric acid applied per acre and the nitrogen and potash left out would never be missed by the crop. No farmer needs to buy nitrogen if he farms properly, except, maybe, in the form of nitrate of soda, to give a growing crop a stimulant top dressing. He should get all his nitrogen from the air by the use of the leguminous crops. It has been abundantly demonstrated that phosphoric acid is the element most needed in all our lands for crop production and this can be supplied either by the use of floats (undissolved South Carolina rock) or acid phosphate. The phosphoric acid in the acid phosphate is immediately available, whilst in the floats it is only slowly available. If the floats are used, it should be in connection with a green fallow or with barn yard manure, when the acid in these will act on the floats and make the phosphoric acid in the floats available. In this issue will be found an article showing the great results attained in crop production by the use of floats and acid phosphate in connection with farm yard manure. Except for the production of tobacco, Irish potatoes and the vegetable crops, potash is but little needed in all the lands east of the Blue Ridge. Experiments have shown that its use on the staple crops in these sections is rarely, if ever, profitable. For tobacco, Irish potatoes and other vegetable crops, it is essential. For tobacco it should always be bought in the form of sulphate; for the other crops, the muriate is quite as effective and cheaper. The Peruvian guano which is again on the market will be found a good fertilizer to use on tobacco and other crops which, from their high value, can bear its cost. It is more of a phosphatic guano than was the old-time Peruvian, but is

fairly rich in nitrogen, sufficiently so for most crops. It, however, needs to be supplemented with some sulphate of potash to give the best results in tobacco. When so supplemented to the extent of twenty-five to fifty pounds to the acre, we have had excellent results reported. We hope that what we have said on this fertilizer question will have the effect of causing more study of the subject of land fertility and crop production and that in the end it will result in live stock being more largely kept to make farm yard manure and the growth of more leguminous crops to feed this stock. In this way a home market will be made for corn and other products and the animals will pay a higher price for the grain than the market and the crop will walk to market instead of having to be hauled. All this will result in increased land fertility and the saving of fertilizer bills, which are now the great tax on Southern farmers. Commercial fertilizers have a legitimate place to fill on every farm, but they can only fill it profitably when the farmer understands how to use them and when. As used at present, the money spent on them is largely wasted.

Oats and oats and Canada peas grown together can be seeded this month if the land can be got into good working order and the weather keeps mild. When the oat crop can be seeded in February, we have known as good results attained even with the Virginia grey winter oat, as when seeded in September or October, but there is more speculation in seeding at this time for if the spring should be a warm, early one, the crop will be short. The oat is a cool weather crop and the winter variety does not succeed seeded in the spring unless the weather keeps cool into May. The two new varieties—the Burt and the Appler—are more certain to make a good crop, especially if the seeding is delayed into March. The Burt will mature in ninety days, and the Appler in a few days longer. We have had excellent reports on the yields made by these varieties. The Culberson has also given good results. Prepare the land well. Do not merely plough and sow the seed and then leave the rest to Providence. Plough, harrow, roll, and prepare a fine seed bed and if the land is not rich give some help in the way of manure or fertilizer (acid phosphate, say, at the rate of two hundred or three hundred pounds to the acre) and sow plenty of seed—two or three bushels to the acre—and cover deeply. After the oats have commenced to grow freely, a top dressing of nitrate of soda—say, at the rate of seventy-five to one hundred pounds to the acre—will greatly help the growth. Apply this when the crop is dry, broadcast.

Oats and Canada peas make an excellent grazing crop for hogs and sheep and come in well to help out until the cowpeas are ready. This crop should be sown this month in middle and eastern Virginia. Further west, in the higher country, it may be seeded in March. Prepare the land well and sow two bushels of peas and one bushel of oats to the acre. Sow the peas broadcast first or drill them and cover deeply with a cultivator or disc harrow and then sow the oats and harrow in. If not needed for grazing, the crop makes good hay cut when the peas are beginning to ripen. This crop should be grazed or made

into hay before the hot weather sets in, as it cannot stand the heat.

Rape may be sown this month for a grazing crop for hogs and sheep. Sow the Dwarf Essex variety. The land should be finely prepared, as the seed is very small and the young plants cannot grow in clods. It may be sown broadcast or in drills two feet six inches apart. It makes the heaviest yields sown in drills and cultivated once or twice. Sow four pounds of seed per acre broadcast or two or three pounds per acre in drills. On good land and with favorable weather, it will be ready to graze in six weeks or two months. This is only a grazing crop and cannot be made into hay.

Grass and clover seed not sown in the fall, which is the best time in the South, may be seeded this month and in March. If to be sown on a fall seeded grain crop, harrow the field first with a spike-tooth harrow, and then sow the clover and grass seeds and harrow again with a light seed harrow and, if dry enough, roll. This will help the grain crop and ensure a much better stand of the clover and grass. If the clover and grass are to be seeded on land not sown with a fall grain crop sow the grass and clover seeds alone without any nurse or grain crop. This will much more certainly secure a stand of grass and clover and, if it stands, will give a hay crop in the fall which will not be the case if sown with grain. To ensure a good stand and a good sod which will last for several years, it is essential that the land be well and deeply broken and the seed bed be made as fine as possible. To sow small seeds like grass and clover in a cloddy, rough field is practically to throw them away. They may germinate, but will certainly largely die when the warm weather strikes them. Make the soil so fine that each seed will be in close contact with the soil all around it and then it can grow and resist the heat. Another thing very essential to the success of a grass stand is a rich, slightly alkaline soil well filled with humus so that it will hold the moisture and be capable of feeding the crop rapidly. To secure these, a light dressing of lime—say, one ton to the acre—should be applied as soon as ploughed and be lightly harrowed in. Let lay for a week and then, if possible, give a dressing of farm yard manure—eight to ten tons to the acre—and let this be well worked into the soil and then apply three hundred to five hundred pounds of bone meal to the acre, and then sow the seeds. Sow not less than two bushels of grass seed per acre with ten to fifteen pounds of clover seed and cover well with a seeding harrow. For a meadow on upland, mix orchard grass, tall meadow oat grass, and herds grass (red top). For a pasture, add to these meadow fescue, Virginia blue, and perennial rye grass, and a few pounds of alsike clover. For lowland sow timothy alone (one peck to the acre), or, if timothy is not desired, sow Italian rye grass and red top mixed.

Tobacco plant beds should be cleaned up and burned well as soon as possible and then chop them over to the depth of two or three inches and make as fine as possible. Apply a good, rich plant bed fertilizer liberally, rake in

and sow the seed and cover the bed with plant bed muslin. Be careful to get your seed from a reliable grower who has selected his seed plants true to type and see that the variety you sow is one adapted to your section and the market you sell in.

We have given extra space to the Poultry Department this month, as this is the time of the year when the poultryman should get busy. A glance at our Advertising columns will illustrate how widely spread is interest in this business in the South. It is now quite a great industry here and brings a large sum of ready money to the farmers. Eggs and chickens are always in demand and sell now at prices undreamed of a few years ago. It seems impossible to glut the market with these products.

HOW TO MAKE FARM YARD MANURE MORE VALUABLE AS A CROP PRODUCER.

In 1897 an experiment was begun at the Ohio Experiment Station to demonstrate what effect would result from the use of gypsum (plaster) kainit, floats and acid phosphate along with farm yard manure in the production of corn, wheat and hay. The experiment is still being carried on. The following table shows the results attained in the ten years which have passed since the experiment was started. The plan of the experiment provides for the use of farm yard manure taken in one case from the open barn yard where it had been exposed during the winter, and in the other case taken directly from the stable to the field, both kinds of manure being originally produced by the same amounts of feed of the same character and both being spread in April on clover sod and plowed under for corn, the corn being followed by wheat and clover in a three year rotation without further manuring or fertilizing until a new rotation is begun.

One-third of the land receives no manure. On one pair of plots manure is applied without any further treatment, on another pair gypsum (land plaster) is mixed with the manure, on a third pair kainit is used instead of gypsum, on a fourth pair floats (freshly ground phosphate rock) is used and on a fifth pair acid phosphate is used. The manure is applied in all cases at the rate of eight tons per acre and the different materials used in treatment are added at the rate of forty pounds per ton of manure.

MEASURE AND TREATMENT	Increase per acre			Net value of increase	
	Corn bus.	Wheat bus.	Hay lbs.	Per acre	Per ton manure
YARD MANURE:					
Untreated	16.0	8.0	698	\$17.22	\$2.15
With gypsum	21.5	11.3	1007	22.12	2.76
With kainit	22.7	11.1	1246	22.13	2.76
With floats	22.9	18.1	1605	28.52	3.31
With acid phosphate	27.2	14.7	1768	29.22	3.65
STALL MANURE:					
Untreated	22.2	9.9	1280	28.70	2.96
With gypsum	25.8	12.3	1310	26.45	3.31
With kainit	26.9	12.9	2079	28.26	3.53
With floats	28.1	15.2	2541	34.56	4.32
With acid phosphate	32.2	15.8	2739	36.44	4.55

The table shows the ten-year average increase produced by the different treatments over the yield of the unmanured land together with the net value of this increase

after deducting the cost of treatment, corn being rated at forty cents per bushel, wheat at seventy cents, hay at \$8 per ton, stover (corn fodder) at \$3 and straw at \$2 per ton.

Director Thorne, in commenting on the table, says that both the gypsum (plaster) and the kainit have been used with profit but the effect of the phosphatic materials has been so much greater that it does not pay to use the others.

The manure is evidently making a part of the floats available, but the net gain from the acid phosphate is greater than that from the floats, although the acid phosphate costs more per ton than the floats. It seems probable that the superiority of the acid phosphate is due, in part at least, to the arrest of more ammonia by this material than by the floats, sulphuric acid being one of the most effective agencies for this purpose, and about one-half the weight of acid phosphate consists of sulphuric acid.

The untreated stall manure has been worth eighty cents per ton more than the untreated yard manure, while the ton of phosphated manure has produced more than twice the increase recovered from the ton of untreated yard manure.

In this experiment the materials used for re-enforcing the manure have been mixed with it only two or three weeks before it was spread on the field; but it is probable that a greater effect would have been produced by mixing the materials daily with the manure during its accumulation, and this method is being practiced by the station in the management of such land as is not under experiments that would be interfered with by such treatment, with the result that these lands are rapidly increasing in productiveness.

In these experiments the yard manure has been exposed only during the winter months. Had the manure lain in the barn yard also during the summer, as it does when it is held for the wheat crop, the loss would have been very much greater.

TWO SOUTHERN FARMS.

Editor Southern Planter:

I have lately visited two farms in North Carolina and Virginia where diverse conditions prevail. The Virginia farm is on as fertile soil as can be found in the United States. The North Carolina one was on what was as poor land as can be found in the world. The Virginia farm is the great Cumberland farm of the late A. H. Lindsay in the Dismal Swamp section just east of the canal. I knew the late owner and had often talked with him about his farm and farming, for he was always glad to attend institutes over in North Carolina whenever they came handy. I had never visited the Cumberland farm, and was therefore glad to accept the invitation of his son, Frank Lindsay, a business man of Portsmouth, to come down and give him some advice in regard to the farm.

We drove down there on a bright sunny day during the holidays. The farm, with its broad and level surface and black soil reminded me of the black prairies of the great corn belt of Illinois, and there is little land in the Illinois belt that can equal it in the production of corn, for the late owner generally averaged 40,000 bushels annually.

On arriving at the farm Mr. Frank Lindsay said that his corn puzzled him. He had great growth of stalk, but had not reached the crop his father made. On looking at the corn I thought that I could readily suggest the reason. The late A. H. Lindsay always grew the Gourd seed or horse tooth corn, the only corn suited to that character of land and climate, while the son evidently had Coccoe's Prolific, a valuable corn for clay soils but totally out of place on that deep black peaty soil. I therefore urged that he get back to the Gourd seed corn and stick to it. Driving mile after mile over the broad area marked out like a checker board by deep ditches, I asked how many acres were in the tract and was told there were 6,000 acres, 3,000 of which are in actual cultivation annually. Two hundred and seventy-five acres are already plowed for the early potato crop. Mr. Lindsay shipped 15,000 barrels of these the past summer and 700 barrels to plant are now stored in a great roofed pit like a mammoth ice-house.

More land is being taken in and a ditch is now under construction six feet deep, twelve feet wide and three and a half miles long. The great mule stable has been admirably constructed for the care and safety of the mules. Each animal is loose in a box stall on each side of the central drive, and each stall has an outside door, so that in case of fire the doors can be opened and the mule cannot run anywhere but outdoors.

The corn is all snapped off and the stalks left in the field and these are plowed under in the spring, for Mr. Lindsay has a large mattress factory in Portsmouth and wants all the shucks for the cheaper grade of mattresses, and the shucks are worth to him more than the stover. His soil is about as inexhaustible as soil can be anywhere, being two to six feet deep, very rich in nitrogenous matter, but really needing some phosphorus and potassium to balance it. Here I thought is the ideal place to test the value of the pulverized phosphate rock for there is plenty of humus for its solution.

In a large building looking like a mill was a curious collection of machinery driven by a steam engine in another building. The corn ears were carried by an elevator and dropped into a machine that shucked and shelled the corn, sending the cobs one way and the shelled corn another to a fanning mill, from which it went to a chute that delivered it into sacks below. The shucks went to another machine that removed the butts and stripped the shucks into ribbons ready for the mattress maker.

I was shown a plot of about ten acres on which a man had been employed to grow celery this year. Coming from the North, this man thought to produce celery in this climate in July, like the Kalamazoo growers. The soil was alright, but the climate makes such a practice impossible, and the celery, earthed up in June, simply turned yellow, and the man left in disgust. I noticed that the celery was taking on a fresh growth since the cool weather, and suggested that there might yet be something made if it was earthed up at once, which Mr. Lindsay proceeded to have done. The only danger is that if the mild weather continues it may run to seed. Grown at the proper season and never earthed till cool weather, this black soil should make a fine and profitable crop of celery for December and January. In another place a

large lot of lettuce was heading well though it has had no protection at all. The main crops of this farm are corn, potatoes and hogs and one could hardly find fault with the continual growing of corn on such land, though I think that more forage and more cattle would be a great help. It is probable that in the humid climate there would be difficulty in curing the cut-down corn in shocks, but I hated to see the waste of corn stover, though under the conditions I could hardly blame the owner for valuing the shucks more than the fodder. But what an immense area of the richest soil in the world could be opened up if the canal was cut out as a ship canal and the locks taken out. One curious fact is that they have to be very careful in dry weather about fire, for the soil will take fire and burn like a coal mine. One man suggested that if the swamp was all drained the whole country would some day catch fire and burn up.

Going from this soil of exuberant fertility to the pine barrens of North Carolina, was about as great a change as one could make in a week. But later I went down to Pinehurst. Nearly every one has heard of Pinehurst, the beautiful winter resort established by the late Mr. Tufts of Boston, on the sand hills of Moore county. I was doing some experimental work in that neighborhood when Mr. Tufts started the enterprise which his son is now carrying on successfully, and had then the pleasure of aiding him by suggestions in the planting. I had not been at Pinehurst for a number of years. The idea of planting a pretty New England village in the most desolate region one could find after the lumbermen had robbed it of the large timber and left only scattering pines and scrub oaks, where, as a friend remarked, the sand runs down to China, seemed a quixotic idea. I dug a well there sixty-five feet deep and found sand all the way down. The late Mr. Tufts built about fifty cottages and four hotels, the last one of which is one of the largest resort hotels in the South. The grounds were well laid out by Mr. Olmstead, the noted landscape gardener, and have been kept up under the supervision of Warren Manning, of Boston. The smooth and winding avenues are bordered with evergreen shrubbery, which has grown well and now makes the grounds very attractive, and comparing it with the wild forest around, one wonders how it could be done, and what a great nerve it took to undertake it.

It is now the paradise of the golf enthusiasts who crowd there by the thousands in winter. There are nine miles of golf links sodded with Bermuda grass, and in the height of the season Mr. Tufts says that there are 250 caddies kept at the handsome country club house.

But I did not go to Pinehurst entirely or even incidentally to note the growth of the place as a winter resort, but to see what Mr. Leonard Tufts is doing in making a farm and garden on that barren land. The necessity for supplying the hotels with good milk and butter and fresh vegetables compelled some effort to produce these on the spot. If it took nerve to make the village, it certainly took more to establish a productive farm in that desolate region where men only went for timber and turpentine, and never thought of clearing and farming the land. Of course it has taken liberal expenditure to maintain a large dairy herd where in the beginning all the food had to be bought from elsewhere. But perseverance and the

great cow pea, corn silage and cows, have brought a marvelous change. The farm is rapidly approaching the profitable stage. There is now on hand cow pea hay and silage enough to carry the seventy-five dairy cows and the young stock through the whole year. Near the barn is a large level field where ensilage corn has been grown every year and all the manure from the feeding of the silage and cow pea hay and bought grain goes back on the field as fast as made. The corn stumps standing in rows only three feet apart showed what had grown there, for that field is now in condition to make seventy-five or more bushels of corn per acre if it was matured and not used as silage. But it reminded me of the little Philadelphia farm of Dr. Detrich, increasing year after year in the yield of forage. In the next field were a number of great ricks of cow pea hay covered with waterproof felt, for the large barns are all too small to hold the product. I was told that that field was sown with early peas and mown and a second crop sown and mown and that five tons per acre of hay were made last summer, and that the hay was fine I saw, for the leaves were on it in plenty and green in color. I wish that every owner of a sandy farm in the South could see what the cow pea can do on land as barren as pure sand can be, but which now is getting black in color and more retentive of moisture and fertility. The admirably built, bright and sunny cow stable, from which every particle of manure is removed as fast as made, the shiny coats of the cows in two groups of grade Holsteins and Jerseys make a great advertisement of the milk and butter for hotel guests, who get enthusiastic over the Pinehurst product, and talk about it when they go where no such milk, cream and butter are found on the tables.

In another section is the market garden, the most profitable part of the farm. Nearly 100 horses are kept during the season for hire and the manure of these all goes to the garden. A large area of frames had a fine crop of lettuce. These were covered with cotton cloth, and Mr. Tufts says that this answers for the fall crop, but for the real winter crop he uses the greenhouses. The lettuce houses are well constructed so that the entire sides can be opened to aid the top ventilators in keeping down the sun heat, and I never saw such a beautiful crop of head lettuce coming on as I saw in a large greenhouse there. It was Rawson's hothouse lettuce and among the thousands I could see no difference in their uniformity.

From another house a crop of cucumbers had been gathered, and baskets of them stood around waiting shipping, for these houses produce far more than the hotels and cottages can consume. In another house there was a fine crop just coming on, while the first house was being planted to radishes. In a third house the cucumbers were just starting to run and radishes had been grown in the meantime. Other houses were filled with carnations and roses and evidently came short of supplying the home demand. Outside in the open grounds were violets by the thousand blooming and being made into bunches.

As a winter resort Pinehurst is a great success, and a great source of profit. The garden has long been profitable, and the farm is now about reaching the same condition. Both farm and garden show the great value of

cow peas and cattle feeding, the manure from which is liberally supplemented with acid phosphate and potash, and a rich and productive soil is being made where none existed before, for the great increase of humus has changed the leachy character of the sand, and made it far more retentive. A greater object lesson of the value of humus can hardly be found.

Out on the unimproved scrub is the poultry farm. A sparkling spring-fed pond is the delight of the ducks and geese. Mr. Tufts finds the Pekin ducks profitable as layers of winter eggs for the kitchens, but he agreed with me that chickens raised on purchased grain are of little profit. There is nothing with which an inexperienced man can figure out on paper greater profits than with the American hen. But, alas, the country is dotted over with the wrecks of chicken farms. The farmer can keep chickens as an adjunct to his farming and not feel the cost, but the man who can buy feed for chickens at present prices and make a living from it as a sole business—well, if he ever exists, his numbers are few. Newspaper writers can give wonderful figures of what the American hen does, but I would like to get a full account of dollars that have been lost on her.

W. F. MASSEY.

ALFALFA.

Editor Southern Planter:

Alfalfa can be a boon to the South. It is just what the cotton farmer wants to supply forage for his work teams, his cattle and hogs or even chickens. No other plant created or even imaginable can so nicely fill its place in the cotton farm. Indeed, to parody what Downing said of the strawberry will better express its true value to us. "Providence doubtless might have made a better plant than alfalfa for our purposes, but undoubtedly he never did. The cotton farmer gets lectures enough about having his smokehouse and his corn crib in the Northwest. But those who criticize him might find that when put to the practical test they would not do very differently or maybe any better themselves. For corn and most other forage crops require the planter's attention just when he is busiest in his cotton field. What he wants is a crop that will not interfere with cotton tending, or but little, and which need not be plowed and planted every year. In fact, something like the permanent meadows of other countries, want of which is so sorely felt by those who were used to depend on them. 'Tis good management in any line of business "to hedge." I was struck by what an Illinois settler in Missouri said to me many years ago. "When I came here in the '50's," said he, "there was nothing grown but corn to winter stock on, and when it rained for weeks together in spring, I used to get awfully blue. But after I sowed timothy meadows, I felt happy thinking when it rains my grass is growing and when the spring is dry I can make corn." If our people had alfalfa to take the place of those Northern meadows that produce feed for stock without plowing and hoeing every year, they could carry their work teams on it alone, or almost so. I have seen plenty of farm work animals which got nothing else and did better than the average plantation mule does on corn and blade fodder or bought timothy hay. For alfalfa is grain and "roughness" combined, at least for animals doing slow work

in the field and is worth nearly twice as much as timothy pound for pound—good thing though it is. And when it rains in May and grass grows in the corn and cotton, the planter can still feel happy thinking his alfalfa is growing "to beat the band."

Alfalfa is a new plant to most of us. Let us study it so we can gain an idea of its requirements, capacities and limitations. It is a native of the valleys of Persia and Media. Its botanical name, medicago, comes from the latter country and its right and old name, "Lucerne," comes through the French "luzerne" from the Celtic



Forty Prize ears, Collier's Excelsior Corn and the Bolgianosilver-chased loving cup won as Sweepstakes Prize over all comers at the State Corn and Wheat Show, Baltimore, Md., December, 1907. This corn also won 1st prize in every class for white corn. This is a splendid example of careful and persistent breeding of corn.

"lus" a herb and "Iran" the old and indeed the native modern name of Persia. When Julius Caesar conquered Gaul and Spain the people yet spoke Gaelic and alfalfa was cultivated in both countries early in the days of Augustus Caesar.

Persia and Media have a climate like our New Mexico and Arizona. Continental, bright, with little rain and subject to extreme heat and extreme cold.

Nature in the course of ages adapted alfalfa to that sort of climate, and this gives a clue to its peculiarities. First of all it must have an alkaline soil to grow in. Persia, other things being equal, would be more likely to have an alkaline soil than we. For the effect of saturating rains is to leach out the alkalies. But wherever there are limestone soils or where shell marl is abundant, as in Tidewater Virginia, it is, or can easily be made, at home. There are many other soils which may also prove suitable, as lime exists in many rocks not distinctly known as limestones. I have been told that the soil in Habersham county, Georgia, where the Rev. C. W. Howard raised lucerne, was derived from a sort of black granite, which is known to yield a good deal of lime and potash also. It is hornblendic granite or syenite. Besides, lime is often quite plentiful in alluvial soils and a test with litmus paper will quickly tell whether a soil is acid or alkaline.

Alfalfa is a native of dry climates and positively refuses to grow in a wet soil. Land quite dry enough to grow wheat and corn may be entirely too wet for alfalfa.

Standing water on or in the soil is certain death to it. Yet it can bear a surprising amount of rain or irrigation water and needs it. And a sudden freshet of a few hours duration certainly does it no harm, provided the under-drainage is good. Alfalfa is decidedly a sun plant, like cotton or Bermuda grass. It requires a bright even more than a hot climate. Shade of any kind is very injurious to it. In view of this fact we can understand how bad overshadowing weeds are and how a "nurse crop" is an abomination. This sunny climate ought to suit nearly as well as its native Persia, or as France or Spain, in respect to a bright sky.

Alfalfa can stand great heat and great cold too provided it is on dry soil. It grows at an altitude of 8,000 feet at Buena Vista, Colorado, in the valley of the Arkansas, where the thermometer thinks nothing of dropping to 20 or even 40 below zero. It stands the heat of the tropics and no month of our summers is too hot for it. Hence it can be sown in any month provided the land is kept moist enough till its roots get below the reach of ordinary droughts. In this respect it is unlike red clover and the European grasses, which our sun will kill while young on even moist land and which are subject to the attacks of fungoid diseases in hot, wet weather, and even when fully established red clover, timothy, etc., stop growing and take a siesta in our hot summers. Not so with alfalfa. It rejoices in heat but must have water also to make new growth. I am sure now that one of the most common causes of failure with alfalfa is late sowing in the fall. In future, I will sow any time the land is well wet and showery weather probable only not more than two and a half months ahead of the first killing frost. This is so the weeds and grasses that start with alfalfa cannot mature seed before frost kills them. Weeds, like lamb's quarter, can stand a hard freeze, but they don't do much harm. Crab grass and chick weed are the great enemies of our alfalfa here, and if I can't circumvent them it will not be for want of trying. We are too apt to think that because timothy, clover, wheat, etc., cannot be safely sown until after the heats of summer are over, that the same is true of alfalfa. But we must not forget that hot weather is never over in tropical countries, yet alfalfa is sown there and succeeds in spite of heat such as we never feel here. Our aim must be to prepare the seed bed early, with soil broken and worked fine as meal, to as good a depth as possible, then furrowed and the crust kept broken after each and every rain so the soil will retain the water from above and below too and the baby weeds will be killed as fast as they come. The undersigned has made many failures in alfalfa growing, but somebody says "the way to learn to hit is to find out why you missed." Looking back over those failures, I can clearly see now why I missed. It was just because I did not know alfalfa and its requirements.

Clay County, Ala.

JOSHUA FRANKLIN.

CROP ROTATION AGAIN.

Editor Southern Planter:

I am pleased to see my suggestion of a discussion of crop rotation in your valued journal is bearing fruit, and prior to a further elucidation to this matter I append tables showing the "Coleman," "Bullfield" and "Hicks" or as I should prefer to call it "Valley Front" rotation, as it was the observation of its successful practice, at the ancestral plantation of Prof. W. C. Stubbs in Gloucester county, which led me to adopt it.

	1	2	3	4
Coleman	Crimson Clover for Corn.	Oats and Ve ch.	Cow Peas, followed by Crimson Clover.	
Valley Front	Crimson Clover for Corn.	Peas, followed by Oats or Wheat.	Grain, followed by Crimson Clover.	
Bullfield	Clover Sod for Corn with Crimson Clover.	Crimson Clover followed by Oats.	Oats, seeded to Clover.	Clover Hay.

In the first place I want to thank Mr. Coleman for the consideration he has shown me in his remarks published in the January issue. It is a pleasure to discuss such questions with gentlemen of his courtesy, and also for the high compliment he pays the Northern farmer who has cast his fortunes in the South. As a born New Yorker myself I cannot help appropriating my percentage of the bouquets he has so gracefully thrown us.

In regard to the rotation, however, I am clearly of the opinion that the cereal and legume crops should follow each other, rather than themselves; a long course of farming that often brings legumes on the land will eventually bring about a condition, even on the best drained and most alkaline soils, where a crop of clover will exert a greater influence towards the fixation of nitrogen when sown after a cereal than when sown to succeed some other nitrogen gatherer.

In other words, the bacteria will work harder when hungry than when surfeited by the preceding crop.

The Valley Front rotation has its weak points, as I have already indicated in my former letter, in leaving the corn land bare all the winter which precedes the pea crop. Professor Stubbs notices this also, but after failing with crimson clover sown in the corn says: "We are still without a profitable suggestion." Mr. Crocket recommends rye between the corn and peas. Could this be sown successfully at the last working and thereby secure a luxuriant growth before winter I think it might be a paying move, not as an improver, but as a conservator of fertility, for in that case the expense would be small, at present prices, not over \$1.00 per acre for seed and labor, which would only have to save to the land about seven pounds of nitrogen to balance the outlay.

The question is whether rye—a plant that loves the cold, and thrives where wheat and oats cannot be grown—

will make a satisfactory showing when sown in this latitude during mid-summer.

I have never seen it tried and withhold an expression of opinion until I have some data upon which an intelligent one may be based.

If we wait until after the corn is harvested to disk seed and harrow the land, it entails much additional expense, and, moreover, will make the seeding so late that on lands of ordinary fertility I doubt whether the crop will be forward enough to cover the land with sufficient verdure to have any great effect upon the loss of fertility.

Where land is fairly level and not subject to washes, there is little loss of nitrogen in winter. Nitrification takes place in the soil only at comparatively high temperatures, and in all probability more nitrogen would be lost from freshly ploughed land laying bare during six weeks in summer than from similar exposure as many months in winter.

Still this question, like all others pertaining to profitable agriculture, is largely one of circumstances. Where soil is filled with easily dissolved nitrates, and is, in consequence, a very fertile one, a winter crop of rye will undoubtedly make a profitable fertilizer trap, because such soil will loose more nitrogen than soils of moderate fertility, and the presence of readily available nitrogen in large quantities, only needing water to make it soluble, will insure that luxuriant growth of rye desirable for this purpose. Poor land, on the contrary, will generally contain little nitrogen in the form of readily desolvable nitrates, and consequently will lose but little during cold weather, nor will it afford the fertility necessary to develop the crop into an efficient nitrogen trap.

Somewhere between the land on which rye will pay and the land where it will not pay, there is a mean where the cost of the seeding will exactly balance the loss of nitrogen where the crop is omitted, and the question whether land is above or below this point in its content of readily dissolvable nitrates is one that can only be settled by individual experiment.

The Bullfield rotation I heartily commend wherever it can be successfully practiced. It is, in my opinion, correct in theory because it brings a legume between each cereal crop, and correct in practice because a careful study of its requirements finds no place where the work is crowded, and it provides a two-year-old clover sod on which the manure spreader can work the winter prior to the corn crop. This question of crowding the work at certain seasons of the year is one of the most important ones in connection with rotation of crops, as no matter how beneficial or profitable a rotation may be, if it necessitates the use of more team at any one time than can be profitably employed during the remainder of the working year, it is so heavily handicapped as to be impractical for the large majority of farmers.

But the Bullfield rotation, notwithstanding its manifold advantages, will hardly suit the low ground farmer operating on the average lands of this section of Virginia; first, because there is no certainty of our securing a stand of crimson clover sown in corn, and a failure would cause us to loose ten months and sow our oats without its preceding legume; and, second, because we can only succeed with the Virginia gray winter oats for fall seeding, and

must seed our clover in the spring, at which time, on fertile land, the oats make such a growth as to make it impossible to properly cover the clover seed. Where farmers are so situated as to be reasonably sure of a catch of crimson clover in the corn and where clover succeeds where sown with fall oats the Bullfield rotation is an ideal one to follow, and I can suggest no alteration which would, in my opinion, improve it, but, for the benefit of those who, like myself, are struggling with low, wet land, I would suggest the following modification where a four-field rotation is desired:

	1	2	3	4
Bullfield	Clover Sod for Corn.	Crimson Clover, followed by Oats	Oats, seeded Clover.	Clover Hay.
Hicks	Clover Sod for Corn.	Canada Peas, followed by Wheat	Wheat, seeded to Clover.	Clover Hay.

Viewed from the point of land improvement only, cowpeas could be again substituted for Canada peas, as neither crop will hurry the work, the question being whether the Canada peas sown in February will cause more loss of nitrogen, when combined with the inevitable summer fallow for wheat, than would be the case where cowpeas are sown early in June to be followed by disk for the wheat in October. Most farmers will be governed largely by the relative price of the Canada and cowpeas, either of which will make more and better hay than crimson clover, and also by the season as some late springs almost prohibit a successful growth of the Canada pea for a hay crop.

PERCIVAL HICKS.

Mathews Co., Va.

We would suggest for consideration whether the difficulty in securing a stand of crimson clover sown in the corn is not largely the result of lack of lime in the soil and of a failure to cover the seed sufficiently when sown. We have in mind several cases where crimson clover always failed to stand on land until lime was added to the soil and then became a certain crop. The effect of lime in inducing the growth of all the clovers is well established and recognized both here and in England, and we believe it will be found the remedy for the trouble experienced in getting crimson clover to stand especially if coupled with the covering of the seed thoroughly at the time of seeding. Our experience has convinced us that more stands of clover are lost from lack of covering of the seed than from almost any other cause. A farmer in northern Virginia wrote us sometime ago that he had failed with red clover for several years sown in the old way on the frozen ground. He then decided to drill in the seed with his grain, and the result was a good stand.

—Ed.

FACTORS AFFECTING THE CORN CROP.

(Continued from the January issue.)

Editor Southern Planter:

It is noteworthy that the ears of the Illinois sample were longer, had a greater circumference, a larger number of rows of grain, and a greater weight per ear than the

native corn. It would naturally be supposed that these qualities transmitted by cross-pollination to the native sample would influence it favorably or unfavorably. The measurements of the grain of Leaming corn from the breeding plat were naturally in favor of the thoroughbred corn grown on the rich lands of the Middle West. The length of twenty-five grains was as 11.29 to 13.54 inches; the thickness, as 3.98 to 4.33 inches; and the width, as 8.45 to 8.28 inches in favor of the Western corn. The per cent. of germination in the field was favorable to the Virginia strain, and the moisture content was about the same in both cases. The yield of the whole crop was favorable to the Illinois sample, as was the yield of stover. The average weight of the twenty large ears was 10.63 ounces for the Virginia strain and 11.49 for the Illinois strain, and the weight of ears from the stalks producing ears was as 8.51 to 8.91. The average yield obtained from the twenty ears of Virginia seed was 47.49 bushels; from the Illinois seed, 44.01 bushels. The per cent. of grain to ear was 84.05 for the Virginia strain and 84.67 for the Illinois strain. The weight of grain from seventy pounds of ears was 58.77 pounds for the Virginia sample and 59.42 for the Illinois sample, and there was practically no difference in the pounds of ears required to make a bushel of grain.

The data show that the grains of the Western corn were shortened during the first season, and their general character and quality changed. It is also noteworthy that the size of the ear was affected, showing how quickly climate influences the character and quality of the corn plant and how readily it adapts itself to a new environment. In 1905 the ears of corn from the Western sample were considerably longer; in 1906 the length was nearly the same. The circumference of the ears was also about equal and the number of rows of grain had increased on the average in the case of the Western strain. The Western sample also led in the average weight of ear, but the difference between the two ears was not nearly so marked as in 1905. There are two ways to account for the changes observed, one being the improvement of the Virginia strain due to the crossing, showing how desirable qualities may be engrafted and how quickly a native corn may be modified by the plan followed; also, how a Western variety will be changed to meet the conditions prevailing in a new situation. We believe that the method suggested is practical and can be followed with success by the average corn grower, who will benefit greatly by following this method of selection and take comparatively little risk in doing so, provided he secures a well established strain of thoroughbred corn to use as sire plants.

The great advantage of using a native strain which is adapted to the climatic and soil conditions predominating in a given locality is apparent from these experiments, showing that improvement by the method suggested can probably be effected more quickly and with greater certainty of results than where a purebred variety of Western corn is brought in which must first be adapted to the local environment before permanent betterment can be brought about; and it is then not likely to possess the hardiness and quality of seed grown under a given set of conditions for a number of years and in which the type has become practically fixed.

The lowest yield from the Illinois seed in 1905 was twenty-eight bushels; the highest fifty-three bushels, a variation of twenty-five bushels. In 1906 the lowest yield from the Illinois seed was forty-two bushels; the highest, sixty-five bushels, a variation of twenty-three bushels. With the Virginia seed in 1905 the lowest yield was thirty-nine bushels, and the highest, fifty-seven bushels, a variation of eighteen bushels. With the Virginia sample in 1906 the lowest yield was forty-two bushels; the highest, eighty-one bushels, a variation of thirty-nine bushels. The variation in the yield of the Western corn, therefore, in 1905 was twenty-five bushels, and twenty-three bushels in 1906. With the Virginia sample the variation was eighteen bushels in 1905 and thirty-nine bushels in 1906. This shows a variation of only two bushels for the two years with the Western corn, and twenty-one bushels with the Virginia corn, showing the marked influence of cross-pollination.

Storing Seed.

The relation of a perfect stand to increased crop yields has been so effectually demonstrated that the best method of storing seed grain becomes a matter of vital interest to all corn growers. A test was made last year to determine what the effect of storing corn in a dry room, on racks in the barn, in the warming oven of a stove, and in a corn crib would have on the germinating powers of the seed the following spring.

The per cent. of germination was lowest with the corn stored in the crib, as would naturally be expected as the seed was exposed to the widely varying temperatures which prevailed during the winter season. The germination was practically the same with the samples stored in a dry room and on racks in a barn, though these methods of storing had little advantage over the use of the warming oven. Considerable difference was witnessed, however, in the strength of the germinations from the corn kept in the several ways indicated. The grain from the corn stored in the crib showed the least vigor of germination, the best results being obtained from the corn stored on the racks in the barn, followed quite closely by that stored in a dry room. The corn stored in the warming oven germinated fairly well in all except two instances. In one, the germination was remarkably low, due either to a poor ear or to the fact that the corn may have been overheated at some time.

These results would indicate that storing either in a dry room or on racks in the barn would be the best plan to follow and it is quite evident from the data presented that the method of storing is a matter of very great importance to corn growers, because the low germinating power and lack of vigor witnessed with the corn stored in the crib would have a marked effect on the yield obtained. The matter of the storage of seed after it has been carefully bred and selected is therefore one which should receive the careful attention of every farmer.

Corn Judging.

The plan followed is to compare ears of corn with a scale of points which is supposed to represent all the essential qualifications. By the "best seed corn" is meant that which will yield the most corn of the highest quality. In our breeding work with corn careful observations have been made of how the different type ears have acted in

the breeding plat with the object of ascertaining which ears should be thrown out in selecting seed corn. Much valuable information has been obtained, which leads to the conclusion that the same value for the different points in judging will not apply to all sections of the country; which, no doubt, accounts for the many different score cards in use.

The value of the score card in judging corn will depend very largely on the experience and practical common sense possessed by the person who is using it. It is quite impossible to define all the points of excellence which should be considered in judging corn. A certain amount of skill in detecting the weak or strong points in every ear can only be acquired through practice. According to our records certain type ears have given very bad results in our breeding work, yet it would be impossible to describe those ears so that an inexperienced person could detect them. Then, again, these bad ears exhibit varying degrees of inferiority so that it is hard to adopt a score card that will do justice to all varieties. In the face of these objections, the score card is still an invaluable guide to the grower and breeder and its use along intelligent lines is strongly recommended.

Ear No. 35 Scored by Western Card.

Points.	Perfect score	Actual score
Uniformity of exhibit	10	8
Shape of ears	5	4
Color of ears	10	8 50
Market condition	5	4 50
Tips of ears	10	6
Butts of ears	5	4 50
Uniformity of kernels	5	3 50
Shape of kernels	5	4
Length of ear	10	3 50
Circumference of ear	5	3 50
Space between rows	10	8 50
Per cent. of corn	20	20
	100	78 50

Ear No. 35 Scored by Virginia Card.

Points.	Perfect score	Actual score
Uniformity and shape of ears	15	10
Color of ears	5	4 50
Market condition and quality of ears.....	25	21 50
Tips of ears	15	9
Butts of ears	5	4 50
Uniformity and shape of kernels	10	8
Space between the rows	10	8 50
Per cent. of corn	15	15
	100	81

The three most vital points to be considered in the scoring of corn according to our experience, are, first, uniformity and shape of ear; second, ears well filled at tip; third, market condition and quality of grain. Whenever these desirable qualities are lacking in any ear of corn used in our breeding plat, very bad results have followed. For this reason we have adopted a score card giving these special points a much higher score than is usually allowed. The following examples will illustrate this

point: Ten ears of corn were scored by this card from the product of ear No. 35, which was our best yielding corn. The market condition of this corn, and the shape and uniformity of the ears were very good, and the tips were fairly well covered. This ear scored 78.5 points by the Western card and 81 by the Virginia Experiment Station card. Ten ears from the product of ear No. 13, our poorest yielding corn, were scored by the same cards, and made 60.5 points by the Western card and 51.25 by the Virginia Experiment Station score card. This sample was cut down on uniformity and shape of ears, market condition, vitality of ears and covering of tips of ears. With the Western card it would have been impossible to score this sample in accordance with its poor quality and low yield, as only 5 to 10 points are allowed for market condition, and 10 for the covering of the tips. The danger lies in the fact that if poor samples of corn are not severely cut on these vital points, they may actually score higher than samples which the judge knows to be much the best corn. It is needless to say that this would be a misfortune of sufficient magnitude to make the changes suggested entirely satisfactory.

ANDREW M. SOULE...

Experiment Station, Blacksburg.

SOIL FERTILITY.

Editor Southern Planter.

Forty odd years ago I remember seeing a quotation from Liebig in some American farm book somewhat to this effect: "The impoverished condition of the lands along the James river, in Virginia, which used to be so fertile, is due to exhaustion of the alkalies and phosphates by a robbing system of farming and not to lack of humus."

A more erroneous and pernicious piece of false teaching than the above would be hard to find. Erroneous because as chemical analysis amply shows, there are enormously rich stores of alkalies and phosphates in those very soils and subsoils within easy reach of plow and plant-root. It was pernicious teaching because it threw farmers off the true track of soil improvement which common observation and practical experience had taught men in all ages. Namely, that one generation of plants lived upon the preceding generation in decay and that the decomposing plants (in some unknown way) unlocked the latent plant food in the soil. For instance, it was well known that the addition of decomposing manure to a raw clay soon changed it into good productive soil and that is more than all the phosphates in Charleston and all the salts in Strassfurt will do. We now know the reason of it. The microscope tells us that decomposing organic matter is alive with micro-organisms as a dead chicken is alive with maggots and they bring about progressive changes not only in that vegetable or animal matter itself, but in the rock particles which constitute the surrounding soil and that through such agency plant food, such as potash, phosphoric acid and lime are liberated from those rock particles as well as from the decaying plants, so that a new generation of vegetation can utilize them just as surely as plants can use the phosphoric acid of an "acid phosphate" or the potash of a Strassfurt salt. In view of these stubborn

facts, what becomes of that oft-repeated, but illogical, admonition one sees in farm literature that manure is a badly balanced soil ration and that legume manuring only supplies nitrogen and vegetable matter and that phosphoric acid and potash must be added or our soils will be exhausted. When the truth is that the addition of humus to the soil is equivalent to the addition of potash and phosphoric acid also, as all practical experience demonstrates. When the four-course rotation, with its humus making turnips and clover supplemented the old English tri-field system with its humus destroying years of bare fallow and its two years of grain crops, undreamed of fertility was developed in fields that had been exhausted in raising wheat to feed Imperial Rome eighteen hundred years before. It is ridiculous to talk of soil exhaustion in this country where few fields are more than fifty years from the forest, and that the richest and most varied forest in the world, outside of the tropics. Of course, there are defective soils in all countries. Some are too acid, some are too alkaline, some lack phosphoric acid and some lack potash, some soils need oxygen—water-logged soils. But it is safe to conclude that a rich growth of oaks and hickories, poplar and lime, gum and walnut bespeak a good all-around soil for farm crops, both chemically and physically. Such as a general thing are the soils in the South. They have all the farmer needs to grow crops in plentiful store and his duty is to develop their latent plant food. The first six inches of soil is practically untouched yet and if coming generations have not the energy and ingenuity to bring new soil from below to gain more phosphates and more potash let them starve and go naked, I say.

Clay County, Ala.

JOSHUA FRANKLIN.

APPLE RECORD FOR AN ALBEMARLE ORCHARD.

World's Record for an Albemarle Orchard for the Largest and longest Profitable Production of Choice Fancy Apples.

Probably the greatest aggregation of scientific and practical horticulturists ever assembled met at Jamestown Exposition in September last.

The regular meeting of the American Pomological Society, the Society for Horticultural Science, the Federation of Horticultural Societies, and the Maryland State Horticultural Society met there under arrangements made by the National Council of Horticulture upon invitation of the authorities of the Exposition Company and the Norfolk Horticultural and Pomological Society.

The first session of the National Congress of Horticulture, composed of delegates from various horticultural bodies in the United States and Canada, also met there. Dr. Samuel Adams Robinson, of Covesville, Virginia, was invited to deliver the address of welcome for Virginia to this Congress. After a few cordial words of welcome, he said in part:

"It is fitting for the first National Horticultural Congress to meet so near the spot where the first fruit trees brought to America were probably planted. It would be interesting to know which of the seventy-eight varieties of apples that Ray described in 1688 as being cultivated near London were first brought here. Possibly some member of this learned body will tell of them during the session of

the Congress. If the history of those trees could be traced, it is not improbable that it would be found that some of the varieties now popular came from that early planting.

"I am sure that Virginia can grow as choice apples as any State in the Union and as many of them to the acre. Indeed, I believe that a small orchard in this State is entitled to the world's record for the largest and longest profitable production of choice fancy apples. This orchard belongs to Mr. J. H. Maxwell, whose father planted it, and it is located at Covesville in Albemarle county. It is composed of fifteen Albemarle Pippin trees, which have produced largely for more than eighty years. One year Mr. Maxwell shipped one hundred barrels of fancy apples gathered from them to Sublett and Cary, Richmond Virginia, for which he received \$700. Another year the apples from one of these trees were sold at the trees for \$5 a barrel, and Mr. Maxwell received \$110 for the twenty-two barrels it yielded. This tree is now bearing a crop of apples which the Hood River Apple Growers' Union of Oregon would sell for at least \$50 if they had them at Hood river. I measured it a few days ago and found its circumference three feet from the ground to be eight feet seven and a half inches. A moderate estimate of the market value of the apples on the fifteen old trees this year at Hood river prices would be \$500. I state these facts to ascertain if a member of this body, representing as it does the best apple growing sections of this continent, knows of any record equal to that of this orchard. If there is any, I should be glad to learn it. There is a tree about thirty-five years old on Mr. Maxwell's place that is now bearing a crop which if packed and marketed as the Hood River Apple Growers' Union would manage it, would bring more than \$180. It is probable that at the prices for which that organization sold its crop for this year, they would bring nearer \$200, and the quality of the fruit is fully equal to the best Hood river pippins. Until three years ago, these trees were never sprayed, and they have never been properly pruned, fertilized, or cultivated. . . .

"I hope many of you will visit our homes. Virginia hospitality shines brightest in its homes. Visit them and enjoy the charm of this hospitality made vibrant by the sweet-voiced, graceful, beautiful, and winsome women of the Southland; then you will indeed taste the lotus of Virginia hospitality, and we shall know that you will never lose an opportunity to return to us, for those who once taste it, hunger for it ever after."

Dr. Robinson's claim that the Maxwell orchard is entitled to the world's record for long and profitable production was not disputed, so that it is safe to claim that honor for Albemarle county.

Seed trade reports seem to point to a shortage of first quality seed potatoes at this time. The yields last season were not only below the average, but the keeping quality was not of the best. Vegetable seeds generally are good quality, with the exception, perhaps, of tomato seed in large quantities.

Trucking, Garden and Orchard.

WORK FOR THE MONTH.

It is yet too early to plant any garden or truck crops except in Tidewater Virginia or in Eastern North Carolina and South Carolina, where Irish potatoes and English peas may be planted in the last half of the month if the weather is open and the land in good order. The work of preparing the land for the crops should, however, have attention at every opportunity so that when the time comes for planting there will be no reason for delay. Whenever the land is dry enough, keep the plows running, but do not turn a furrow when the land is so wet that the soil will not turn off the mould-board in a nice, loose, crumbly condition. Land which has not been ploughed since the crops were gathered should be first ploughed and then take up those which have been turned over and cross plough them so as to further break and mix the soil. Read what we have written in the article on Work for the Month on the farm on this subject. However important it is for the general farmer to well prepare his land by repeatedly ploughing and cultivating it before putting in his seed, it is infinitely more important for the truck grower and gardener to well prepare it, as no vegetable or truck crops can be successfully grown except on land as finely prepared as possible. To grow these crops successfully and profitably, they must have an abundance of plant food readily available so as to induce quick growth and early fitness for the market. Only land finely prepared and richly fertilized can meet these requirements, and these conditions should be met as early as possible in the season so that when the crops are sown or planted they will find the proper conditions available. Plough the land deeply and throw the furrows up as high as possible so as to admit the sun and air and thus secure drying and warming of the soil. After the land has been ploughed, apply the compost heaps which we advised to be made earlier in the winter, broadcast, and apply this matter in liberal quantity. Twenty or 25 loads to the acre will not be too much. If acid phosphate and muriate of potash were not mixed in these compost heaps when they were thrown up, these mineral fertilizers should now be applied to the land and be worked in with the compost. All vegetable crops are great consumers of these mineral fertilizers and from four hundred to five hundred pounds of acid phosphate and one hundred and fifty to two hundred pounds of muriate of potash can, with advantage, be applied per acre. It takes time for these mineral fertilizers to become available after they are applied and therefore the sooner they are applied the better. There need be no fear of their leaching away. If no compost is available, then apply the best rotted manure from the barn yard liberally and use the acid phosphate and potash with this. In an article in this issue will be found a report showing how much better returns can be secured from barn yard manure when supplemented with acid phosphate and potash. Don't apply mixed commercial fertilizer at this time of the year, as it will only result in the loss of the nitrogen (ammonia) before the crop is planted. Nitro-

genous fertilizers are most valuable for forcing the growth of vegetable and truck crops, but they should not be applied until near the time when the crop is to be planted or in the case of nitrate of soda, when the crop is starting growth. Fish scrap and cotton seed meal, both nitrogenous fertilizers, require some time to become available, and therefore should be applied some time before the crop is planted, but not so early as the mineral fertilizers. Few of the brands of commercial fertilizers offered on the market are rich enough to meet the requirements of vegetable and truck crops, and we therefore submit a few formulae, giving the directions for making home mixtures for these crops. Thoroughly mix the ingredients on the barn floor by turning them over several times with the shovel from one side of the floor to the other, and it is well to run the mixture through a riddle to take out the lumps and then break these fine and re-mix.

For Irish Potatoes.—Nitrate of soda, 300 pounds; cotton seed meal, 600 pounds; acid phosphate, 800 pounds; muriate of potash, 300 pounds, to make a ton. Apply at the rate of from 500 to 1,000 pounds to the acre.

For Beets and Lettuce.—300 pounds of nitrate of soda, 800 pounds of cotton seed meal, 600 pounds of acid phosphate, 300 pounds of muriate of potash. Apply at the rate of 500 pounds to the acre.

For Cabbage, Cucumbers, Melons and Canteloupes.—300 pounds of nitrate of soda, 700 pounds of cotton seed meal, 750 pounds of acid phosphate, 250 pounds of muriate of potash. Apply at the rate of 500 pounds to the acre.

For Asparagus.—200 pounds nitrate of soda, 700 pounds of cotton seed meal, 800 pounds of acid phosphate, 300 pounds of muriate of potash. Apply 800 pounds to the acre.

For Tomatoes and Egg Plants.—200 pounds of nitrate of Soda, 750 pounds of cotton seed meal, 750 pounds of acid phosphate, 300 pounds of muriate of potash. Apply at the rate of 600 pounds to the acre.

Asparagus beds should be worked over as soon as the ground is dry enough and be covered with a thick layer of good rotted manure, mixed in accordance with the above formula and be then covered with eight or ten inches of fine soil.

Strawberry plants may still continue to be set out. They should be got out as soon as possible so as to get well rooted before the hot weather sets in.

Strawberry beds coming into bearing this spring should be worked over as soon as the land is dry enough and have a top dressing of one hundred pounds of nitrate of soda, four hundred pounds of acid phosphate, and four hundred pounds of muriate of potash per acre. This should be spread down each side of the row and be worked in with the cultivator. Mulch between the rows next month to keep the berries clean, using pine tags or marsh hay.

Irish potatoes may begin to be set out in the latter half of the month if the land is in good order. Only set out the earliest varieties and not a fall crop of these, as they have considerable risk of frost to run and may have to be re-planted. Fertilize liberally with the formula above mentioned, as much as one hundred pounds to the acre is frequently applied. Set in rows two feet apart and fifteen inches apart in the rows. Do not cut the sets too closely. They should have two or three eyes left in each piece.

English peas may be planted the last half of the month if the land is ready and the weather mild. They are hardy and even a sharp freeze does not hurt them much. Sow deeply and cover four or five inches treading the seed into the ground so as to compact the soil around it.

If the weather is mild and the ground dry enough, fall set cabbage plants should receive the first cultivation. Cabbage plants may be yet set out from the seed beds.

Small patches of lettuce, radishes, and cresses may be seeded in sheltered spots for early salad.

THE SCUPPERNONG GRAPE.

The article in our last issue on this grape seems to have attracted considerable attention as we have had numerous letters on the subject asking for further information. Those desiring the latest information on this family of grapes (*rotundifolia*) will do well to write to the Director of the South Carolina Experiment Station, Clemson College, S. C., and ask him to send them Bulletin No. 132 just issued by that Station which deals fully with the subject. It should be clearly understood that this grape is only a success in the southeastern part of this State and in the States further South. In connection with the demand for the grape for wine-making, Prof. Phillips in an address before the Pomological Society at its recent Jamestown meeting stated that one winery—the Garrett Company, of Norfolk—makes over 1,500,000 gallons of wine every year almost wholly from scuppernong grapes and that there is one vineyard of nearly 1,000 acres devoted to the production of this grape just across the line dividing this State from North Carolina and convenient to Norfolk, to which point the grapes are sent for the use of the Garrett winery.

STRAWBERRY GROWING IN ALABAMA.

Our subscribers Messrs. Larkey and Son, of Scott county, Virginia, write us that they are now growing strawberries and peaches in Alabama about forty-five miles north of Florida. The advantage they thus secure in extending their plantings South is the ability to cater to the early market. The land is in the Long leaf pine section and is a dark sand loam underlaid with red subsoil. Strawberry planting is done in November and December and they have known the first ripe berries to be picked the 21st February following. The planting is done in the following expeditious manner. After thoroughly preparing the land the rows are marked off with open furrows thirty inches apart. In these furrows a fertilizer distributor is run mixing 300 pounds to the acre of specially prepared fertilizer. The plants are then dropped

by boys and girls four feet apart in the rows being careful to place all plants on the same side of the furrow so as to ensure equal width of rows. Each dropper is followed by a careful hand with a hoe with which he covers the roots with one stroke of the hoe. He then places his foot on the soil covering the roots and presses it solid, being careful not to bury the plant too deep. A man can in this way easily plant one acre per day. In about ten days cultivation is commenced and continued until a matted rows is secured one foot wide, being careful not to let the plants set too thick. After this the runners are cut off close and the ground between the rows kept free from weeds and grass. In January the plants are top-dressed with 300 to 500 pounds of an 8-4-8 fertilizer, being careful only to apply it when the plants are dry. The berries ripen in this section of Alabama early in April. The varieties grown are largely Klondike and Lady Thompson. Five hundred dollars worth of berries per acre are regularly shipped with a net profit of \$300. The fruit is all sold through well organized associations of shippers.

PEACH GROWING IN VIRGINIA.

(Extract from an address delivered by Prof. W. L. Phillips, State Entomologist, before the American Pomological Society at Jamestown meeting, September, 1907.)

About the first really commercial venture in peach growing was an orchard of 4,000 trees planted by J. C. Moomaw in Botetourt county about 1865. The industry grew from this small beginning until about 1890, when the census credits Botetourt county with 13,000, the adjoining county of Bedford with 62,000, Roanoke with 35,000 and Fairfax with 50,000 trees. The counties of Scott, Washington and Pittsylvania were credited each with over 50,000. The counties of Essex and Westmoreland in the Tidewater section followed closely with 45,000 and 26,000, respectively, while the industry had made no progress worthy of note in Albemarle, Augusta and Frederick, now the banner counties. The figures indicate that except in Botetourt county the peach industry had scarcely begun in 1890.

Desultory plantings were made, however, at a much earlier date and at times good prices were obtained for the fruit. An orchard was planted in Fairfax county by D. C. Munson about 1852, the fruit from which sold for \$4.50 per bushel in 1858.

Though the San Jose scale had done considerable harm and caused some reduction in the rate of planting peaches soon after it became known, it has not affected this industry at all compared with the disease known as "Peach Yellows." This disease destroyed the orchard of Mr. J. C. Moomaw at Cloverdale in Botetourt county about 1878, and, though the number of trees in the county is given as 105,000 in 1900, I feel quite sure there are not now in the county 25,000 bearing trees. The nearby counties of Bedford, Franklin, Roanoke and Montgomery felt the scourge of this disease at a somewhat later period.

After this outbreak, large orchards were grown on the same soil in Botetourt county some of which were destroyed in 1898 and later by San Jose scale. The "Yellows," after the first serious outbreak, appears to have lain dormant, or nearly so, until within the last ten years. It is now

threatening the very life of the industry in the counties of Albemarle, Fairfax, Frederick, Shenandoah, etc., and is quite widely disseminated in many sections of the State where peaches are only grown for home consumption.

Why the industry has declined in the counties of Scott and Washington in southwest Virginia, I am not prepared to state, for the climatic and soil conditions are certainly favorable to the growth of this fruit.

The late frosts in Tidewater and Middle Virginia operate quite seriously against this industry, though, as mentioned previously, Essex and Westmorland counties have attained in the past considerable note, and Greensville county is now building up the industry.

While the increase in peach growing in Albemarle, Augusta, Fairfax, Frederick and other counties was marked between 1890 and 1900, amounting in some cases to as high as 1,000 per cent., the increase since that date, for which we have no records except those gathered by the Crop Pest Commission, has been almost as marvelous.

The number of trees examined by the "Yellows" inspectors in Frederick county is a little over 250,000, though I am quite sure the total number of trees in the county must reach 500,000. The increase in Albemarle, Augusta, Shenandoah and Rockingham counties has been about as marked.

As a rule, the later peaches are grown so that the main crop is ready for market about the latter part of July, just after the bulk of the Georgia crop has been disposed of. With such peaches as Late Crawford, Stump, Bilyeu, Heath, Salway, Smock, Albright, etc., the market can be held well into October, then there is very little competition. Some of these late peaches often bring upwards of \$3 per five-eighth bushel crate. I have known a number of trees at three years of age to bear two and a half bushels of No. 1 peaches. Estimating 100 trees per acre, this gives something like \$250 gross proceeds even if only \$1 per bushel is realized for the fruit.

The industry has developed in spite of the fact that Peach Yellows has been prevalent in a large part of the State during the entire period, though, as mentioned above, the disease now threatens to destroy the industry entirely. It is interesting to note that a Yellow's law was enacted about 1890, but the opposition to it was so great that nothing was accomplished. The growers are now, however, alive to this great question, and there are, at present, forty-two inspectors at work in the State. The foremost counties in this fight are Augusta and Fairfax, which have appropriated \$600 and \$1,000 respectively, to aid in the inspection work and enforcement of the law.

The number of trees in Floyd county has increased more than 500 per cent. since 1890, though the bulk of these plantings are from fifteen to twenty-five miles from a shipping point. The product in this county and also in Franklin and at some other points distant from the railroad is largely used for canning purposes, which proves that the peach industry is not entirely dependent upon railway facilities. There are a large number of isolated coves in this and other counties where a large grower could purchase a section almost surrounded by mountains

and control peach yellow's practically without the cooperation of his neighbors.

Virginia is preeminently an apple growing State, but the growth of peaches, cherries, small fruits, etc., should have a very prominent place in the orchard economy. The apple being largely a biennial crop, the demand for labor is larger during a period of about two months at gathering time, once in two years, and should there not be a corresponding development in growth of the above fruits, the labor problem would soon be beyond control. By growing these fruits, however, and having them to ripen successively through the year, a large number of laborers can be held in the vicinity thus helping to prevent the necessity of importing such a large number of workmen for gathering apples.

The labor problem alone would make it undesirable for a grower to plant an over large acreage of any fruit, especially if the entire neighborhood follows along the same line. I feel quite sure of my position in stating that the best returns are likely to be obtained from intensive work plantings that aggregate, on the whole, less than 25,000 trees.

SMALL CANNERRIES ON THE FARM.

Editor Southern Planter:

These long winter nights cannot be utilized to better advantage than planning out our work for the coming year. In looking for means of getting more cash from products, many farmers would find it profitable to can their surplus fruit and vegetables. Several small canning outfits are now being advertised at from \$5.00 up, any of which will do good work and pay handsomely, but a home-made outfit with a much larger capacity can be made by any one. For \$10 an outfit can be made which will easily put up 25,000 cans in a season. All that will be needed is a tank with wooden sides and sheet iron bottom placed over a rock or brick fire box for boiling the cans, several sheet iron baskets to set the cans in in the tank and lift them out, a gasoline or kerosene oil blow heater and soldering irons. The blow heater and solder irons will cost about \$6.50, two sheets of sheet iron for the tank and baskets will cost about \$2 more. There are a great many other conveniences that can be added from time to time as experience shows the need for them, but with this simple outfit as good work can be done as with the most expensive plant, and rapidly enough to can all the products a small farmer is likely to have until he has gained sufficient experience for a larger outfit.

Henry Co., Va.

RETRAC.

TOMATO GROWING.

Editor Southern Planter:

The growing of the tomato—a member of the "solanum" family, once thought to be poisonous and called the "love apple"—has become one of the important productions of Maryland. It covers quite a large territory, particularly on the Eastern Shore, and is proving quite remunerative to both growers and canners. It ranks very high as a replenisher of depleted soils, always improving the ground on which it is grown by its luxurious vegetation.

It grows best in red clay soils that contain a certain per cent. of soluble silica and iron. The soil should be well

drained and prepared for the crop by thorough ploughing and subsoiling, and rolled and harrowed to a fine condition. The fertilizer should be put on about half (200 pounds) by a drill and the other half in and around the plants just after the plant is set in the soil either by hand or the plant setter. The rows for the tomato plants should be about three and a half feet apart, set in hills or continuous rows three feet apart. When the plants are set by a plant setter they can only be cultivated one way, therefore, the ground should be put in very nice condition and, immediately after the plants are set, they should be worked with a light harrow. They should be worked every eight or ten days, depending upon the moisture in the soil—the drier the soil, the more frequently and deeper they should be worked. When the vines get in bloom pretty generally, then lay by with a smaller furrow thrown to the plant, and now is the time to sow crimson clover seed, or any other grass or clover seed that you may desire, letting the vines protect the tender sprouts from the seed during the winter.

It also makes an excellent preparation for a crop of wheat, which can be easily put in by running a disc harrow over the vines, cutting them up and then turning them down, pack them with a roller and sow the wheat with a disc drill—300 pounds of phosphate to the acre can be used with good effect, insuring a stand of clover or timothy.

This method of growing yields good returns, generally eight and sometimes twelve tons to the acre and leaves the land ready for a crop of hay or wheat the next season, with the quality of the soil very much improved by a large per cent of humus and other plant food, in fact, it almost changes the condition of the soil. The seed should be sown in beds in the early spring and covered with fine soil very lightly. They should be in rows and the ground over the seed slightly raised so that when the seeds begin to come through a small rake can remove the earth over them. They should be worked at once, and, if too thick, should be thinned out by hand. When about eight inches high they should be set out in the ground, care being taken to keep the young plants in muddy earth if the ground is very dry.

Too much care cannot be taken with the plant beds. They have to be watched for worms and potato bugs and, if necessary, use a very weak solution of Paris Green on the young vines—one ounce to half barrel of water will kill the insects and not injure the plant. It should be put on with the sprayer, not too heavy, as the slightest particle will kill the worm or bug without injuring the plant.

Tomatoes should be gathered in boxes or baskets holding about sixty pounds. They haul better in square boxes although the ordinary peach basket is very much used.

The varieties of the tomato are innumerable, but be certain to get a fair sized, perfectly round tomato with no depression at either end. The canner generally furnishes the seed so as to have them unmixed in their color. In picking tomatoes great care should be taken to get them uniformly ripe and all the same color; a well ripened tomato has very little water and is always desired by the packers. A well grown tomato raised on proper soil will have a very small per cent. of water and will fill more cans to the ton than a watery and badly colored fruit.

One of the diseases of the tomato plant, like all other solanums, is of the character of a blight, which withers the leaves and leaves the fruit about half grown and of a pale red color containing very little solid meat. This shows that the soil is not in good condition and does not contain any plant food that is available for the tomato, although it might be for something else. The average price for tomatoes is about \$9.00 per ton, which is 15 cents per basket, and, running about eight tons to the acre, yields about \$70 to the acre, and certainly seems to be a better money crop than corn, wheat or potatoes, and as the demand seems unlimited—it being more used than any other variety of canned goods—it is bound to become one of the crops of the future. They are exceedingly wholesome and fill a long felt want—a cheap canned vegetable, an anti-scorbutic that can be carried to every part of the world, receiving from the earth its own sustenance and returning as much or more than it receives.

The canning of tomatoes is a busy and interesting operation in a modern equipped factory where everything is convenient. The tomatoes are received by weight on platform scales situated convenient to the office where the load is weighed, baskets, wagons and all. They are then driven to the receiving shed, which is near the scalding, and unloaded. The same number of empty baskets are then put in the wagon and the wagon and baskets returned to the scales and the weight is taken and deducted from the full wagon, showing the net weight. After the receipt of a few tons, the scalding is started and the tomatoes are distributed to the peelers at the rate of ten tons per hour. After being peeled and all defective and green parts cut out, they start on their journey to the filler, which automatically fills forty cans a minute, if necessary, and even more. The cans then pass under a rotary brush which cleans off the top and the solder edged cap is placed on the top and the can passes on to the capper, which adjusts itself to the can and caps twelve at every complete movement. The cans then go on their journey to the boiling tanks, where they are placed in a large iron tray and lowered in boiling water from thirty-five to forty-five minutes. They are handled by a steam crane which takes them to the cooling shed where they are inspected and prepared for labelling and boxing. The canning house should be convenient to a railroad so that the empty cans can be put directly in the second story ready to come down the spout to the fillers, care being taken to keep the can bottom down so that every stroke of the filler will fill a can. The canned goods should be kept in the end of the canning house next to the switch so as to save handling so much; in fact, they should be piled in the extreme end next to the switch. Labelling is generally done by hand, as an expert labeller will compete with a labelling machine. The cans are placed in a box holding two dozen after being labelled, the boxes being stenciled before filling.

The waste portions of the tomato, passed through a pulping machine, can be barreled up for ketchup for which there is always a demand, thus adding to the profit of the business.

A word should be said about keeping the factory clean. It should be placed in a position where there is drainage and thoroughly washed out with hot water through a hose

every night; not only the floors, but all the machinery should be kept perfectly clean.

Worcester Co., Md.

EDWIN J. DIRICKSON.

The above article is written by one of the most successful growers and canners of tomatoes in Maryland, and will, we hope, be of assistance to growers in this State. We note that upon one point the writer is not as definite as we could have wished—that is, as to the best fertilizer to use. We would like to hear further from him on this.

The Maryland Experiment Station, in a Bulletin on this subject has this to say on the subject: "Stable manure at a dollar per ton is probably the cheapest fertilizer known. This, at the rate of twenty tons to the acre, can be ploughed down in the fall in a fresh state or rotted and applied before re-ploughing in the spring. If the supply of stable manure is limited, it can be used in smaller quantity in combination with commercial fertilizers and often give better and more economical results than by the exclusive use of either of them. If stable manure is out of the question, commercial fertilizer may be used, and if applied on a sod field that has been fall ploughed, will give excellent results. The best way to obtain a reliable fertilizer is to buy the materials and mix at home. In most cases a fertilizer that will analyze in nitrogen, phosphoric acid and potash relatively about the same as barn yard manure will give the best results. See, however, that some of the nitrogen is in a form readily available, preferably in nitrate of soda. The following formula may be used for mixing a good fertilizer for this crop: Dissolved phosphate rock (acid phosphate)....600 pounds. Dried blood or tankage.....900 pounds Nitrate of Soda.....300 pounds. Muriate of potash.....200 pounds

—
2000 pounds.

The mixture would analyze, approximately—nitrogen, 6 per cent; phosphoric acid, 4 to 5 per cent.; potash, 5 per cent.

This is a good mixture to use without manure and should be applied at the rate of 500 pounds to 750 pounds per acre. If the land has been well enriched with manure all that will be necessary is to supply some readily available plant food to give the plants a start. A good formula for this would be:

Acid phosphate.....175 pounds.
Nitrate of soda100 pounds.
Sulphate of potash..... 25 pounds.

Apply this quantity per acre in the furrow before listing. Bone meal may be substituted for the dissolved South Carolina rock (acid phosphate).—Ed.

THE VIRGINIA STATE HORTICULTURAL SOCIETY.

A representative and influential committee of the members of this society with Dr. S. A. Robinson as chairman has been before a committee of the Legislature in support of a bill which the society has introduced in the General Assembly under which it is asked that the Legislature shall appropriate the sum of \$5,000 to be applied by the Society in advancing the pomological and horticultural

interests of the State. The Society presented a strong case before the committee showing how much greater progress was being made in the development of apple production in other States. Especially in the West and Northwest where the Legislatures had been liberal in support of the local horticultural society's efforts. The fruit produced in these States was competing strongly with Virginia grown fruit in the markets of the world and being sold for higher prices than our fruit owing to the care expended in its production, packing and marketing, thus making it more attractive to buyers though intrinsically not so good as our fruit. It was stated that apples from Oregon and other Western and Northwestern States were being actually sold in this State in competition with our own production and fetching higher prices. The Society aims, if it secures the appropriation asked for, to put men into the field to instruct orchardists in the care of their orchards and the grading and packing of the fruit and to give attention to the finding of new markets for our product. There can be no question that the fruit interests of the State deserve the help which is sought and that if given it will result in the enhancement of the taxable property of the State and thus more than justify the expenditure. Virginia is the oldest apple producing State in the country and it produces varieties than which no better are grown anywhere, but there has been great disregard of the requirements of modern orchard management and a want of care as to the varieties to be planted in different sections and especially has there been gross carelessness in putting the fruit on the markets in the best and most attractive ways. All these points will have consideration by the Society and they will hope by a strong organization to correct what is wrong and make fruit growing more profitable. We would urge our readers to ask their representatives in the General Assembly to support the bill offered by the society.

PROFESSOR MASSEY'S NEW BOOK, "PRACTICAL FARMING."

This new book is probably the best and most generally valuable book which Prof. Massey has yet written. It ought to be in the hands of every Southern farmer and we are anxious that it should be. To aid in this we will send the book and the Southern Planter for one year at the price of the book alone, \$1.50, or we will send the Southern Planter for three years and the book for \$2.00.

The old saying that "cultivation is manure" may not be entirely correct, but cultivation certainly does enable the plants to derive the greatest benefits from the fertilizers used. Cultivation also conserves the supply of moisture in a dry season, and by keeping the soil constantly loose and open, admits air to the roots. If the soil is left slightly ridged over the row or hills when the potatoes are planted, cultivation can be begun before the shoots appear above the surface.

After the plants attain a height of ten to twelve inches, draw up the earth to form a ridge or hill about the plants, but before this is done, extra feeding can be given by working the soil away from the row and sowing another dressing of fertilizer along both sides of the stalks, afterwards throwing the loose earth up to the vines.

Live Stock and Dairy.

THE HYGEIA HERD OF HOLSTEIN-FRIESIANS.

An Example of Royal Breeding—Pontiac Calypso's Son.
Editor Southern Planter:

It may be of interest as well as a source of profit to the readers of The Planter to learn something of the most famous families of the Holstein-Friesians. We can, perhaps, best follow the subject by tracing the breeding of one of the direct descendants of several of these families.

The history of the breed in America began in 1795 with an importation into New York State of a few head from the Netherlands, where for over two thousand years they had been bred pure. The first practical work, however, of introducing and developing the breed in America was begun in 1861 by an importation made into Massachusetts by Winthrop Chenery. Since then importations have been made from time to time by various breeders all over the country.

Among the families first imported and of which our example is a direct descendant are Aaggie, Pauline Paul Wayne, Dekol 2d, Netherland, Pietertje, and Empress. Aaggie was imported in 1879. The following year, while carrying twins, she gave 18,004 pounds of milk. Queen of Wayne was the first of this family to be brought to America. She gave, at 12 years old, in one year, 29,008 pounds of milk, and in the twelve years nine and a half months following the birth of her first calf, she gave 195,770 pounds of milk, a daily average of 42 pounds for every day of that time. Pauline Paul's butter record of 311 3-4 ounces in seven days was the largest butter record reported at that time. Empress had a milk record of 114 pounds in one day. Dekol 2d, to whom Pontiac Calypso's Son traces twice, was, without question, the most wonderful cow of the breed and the certainty of her remarkable powers of transmission is constantly being demonstrated by the extraordinary records of her progeny. At eleven years old she produced in an official test 26.57 pounds of butter in seven days from 536 3-4 pounds of milk. One of her daughters produced 24.15 pounds of butter, while her seven sons have over 160 A. R. O. daughters, one hundred of which have records averaging 19.6 pounds each.

Let us now trace the lines of descent from these families as from generation to generation they intertwine, finally culminating in Pontiac Calypso's Son.

Pontiac Calypso's Son was from Pontiac Calypso and by Beryl Wayne's Paul DeKol, sire of 24 A. R. O. daughters, including the World's Champion Yearling, Shadybrook Gerben Parthenaea 4th, who, at twenty months thirteen days, produced in seven days 17.85 pounds butter, her milk testing 6.79 per cent. fat. He was from Beryl Wayne, A. R. O. 27.87 pounds, and by DeKol 2d's Paul DeKol, sire of 45 A. R. O. daughters, 20 of which average 23.22 pounds each, including the World's Champion to 1907, Aaggie Cornucopia Pauline, A. R. O. 34.31 pounds. He was from the great DeKol 2d, and by Paul DeKol, a son of Fauline Paul, and by another son of DeKol 2d.

To return once more to Beryl Wayne, the dam of Pontiac's sire. We find she was from Beryl 3d's Empress and

by Aaggie Prince of Wayne, all of whose daughters average over 21 pounds butter each. He was a cross between Royal Aaggie and Princess of Wayne, daughter of Queen of Wayne, spoken of above, who averaged over 42 pounds of milk per day for her entire milking period of twelve years nine and a half months. So much for the families to which Pontiac Calypso's Son traces through his sire.

His dam, Pontiac Calypso, is one of the best, if not first, among the daughters of the Champion Sire, Hengerveld DeKol. At two years she produced, in an official test, 15.96 pounds of butter in a week, at three years 23.5 pounds, and at five years 28.43 pounds in seven days; 114.67 pounds in thirty days. Her sire, Hengerveld DeKol, has over 80 A. R. O. daughters, 10 with first calf averaging 171.2 pounds butter each; 7 average 26.08 pounds and 20 average 23.4 pounds. He was from Magadura and by a son of DeKol 2d by Sir Abbekerke, a direct descendant of the two great cows Tirania and Mechthilde.

Magadura was from the Ex-Champion Butter Cow, Netherland Hengerveld, A. R. O. 26.66 pounds, by Milla's Pietertje Netherland. In the history of official testing but 56 cows have produced 100 pounds of butter or over in thirty days in official test; of this number, 25 trace to Milla's Pietertje Netherland.

The dam of Pontiac Calypso was Lady Themis from Useful and by Calumbo '93, the sire of the dam of the Ex-World's Champion two year old, Pontiac Calumbo, who produced, in an official test, in seven days 19.5 pounds butter, and at four years, 24.7 pounds.

Space will not permit me to go more into detail in this article, but let me, as a summary, note the results obtained by the intelligent crossing of the best families of the breed. Looking back from Pontiac Calypso, in whom all these blood lines center, we find six cows who hold or have held Championship of the World in butter production. Four of his nearest dams average, in official test, 27.36 pounds butter in seven days. He has 24 A. R. O. half-sisters, one a World Champion. His dam has 79 A. R. O. half-sisters, one a World Champion. His sire has 45 A. R. O. half-sisters, one a World Champion.

Experience teaches us that the old adage "Blood will tell," is as true of the bovine as in the human race, and it is well to bear this fact in mind when buying foundation stock for a dairy herd.

I might say in conclusion that the term "A. R. O." means Advanced Registry Official, and when used in connection with a record, indicates that the cow was tested under the supervision of a representative of a State Experiment Station. This representative watches the milking, weighs, samples, and tests the milk. Sworn affidavit is made to the correctness of the record by the official tester, the owner of the cow, the feeder and milker, and also the director of the Station under which the test was made. All A. R. O. records are made under the same rules so that perfect uniformity is secured.

I will try to furnish The Planter with a cut of Pontiac Calypso's Son some time in the near future.

J. B. LOOMIS,

Crozet, Va.

Superintendent Hygeia Herd.

PYAEMIC ARTHRITIS.

A Disease Attacking Young Foals, Calves, Lambs and Pigs.
Editor Southern Planter:

Prior to the more recent bacteriological research, the theories advanced regarding Pyaemic Arthritis in young animals were as numerous as the writers. Observed in all species, it affects particularly colts, calves, lambs, and young pigs. Up to the middle of the last century, Lecog reports one-fifth of sucklings destroyed by it. Out of 187 colts that died in the Provincial breeding stud, Wurtenberg, during fifteen years, 85 were killed by this disease. While its frequency has diminished with the progress of hygiene in stables and barns, its mortality remains 50 to 90 per cent. of the subjects affected, and most of those that survive remain with persistent chronic swellings of the joints, and continue to be sickly and backward in growth.

Causes.

In 1869 Bollinger first drew attention to the correct etiology of this form of Arthritis, when he demonstrated it to be a general infection proceeding from primary navel infection, principally by the streptococcus vulgaris, which naturally and easily occurred at the time of birth through the navel soon after birth coming in contact with infected soil or bedding, giving rise to certain pathogenic conditions about the umbilical vessels (Omphalo-Phlebitis) with thrombosis of the portal veins and its branches to the liver, followed by general pyaemia.

Symptoms.

Frequently a chain of general symptoms precede articular manifestation, their duration, however, are in keeping with the severity or virulence of the infection, while all cases of neglected puerous urachus (according to our experience) have led to pyaemic arthritis, this condition is not essential to its production. The earlier manifestations are usually those of fever with indifference or entire lack of desire to suck, the little subject is listless and gaunt; in mild cases, these symptoms may be overlooked and the first noticeable symptom is that of lameness, which at first stimulates traumatism. Metastasis, quickly followed by suppuration being usually sufficient to unveil its true identity to the experienced. The umbilicus is swollen, painful and suppurating, the patient lies down most of its time, is feverish and becomes rapidly emaciated, the affected joints are much swollen, hot and painful, the animal being unable to bear weight upon the lame leg; foetid diarrhoea followed by constipation usually occurs; such complications as are usual in pyaemia set in, ophthalmia, pneumonia, and nervous disturbances, quickly followed by a fatal termination.

Course.

In foals, the course is usual acute. The average duration being from a few days to as many weeks. The prognosis is very unfavorable; estimates of mortality range from 50 to 90 per cent., the remainder gain health slowly if at all.

Differential Diagnosis.

The metastatic character of this disease is very suggestive of articular rheumatism, but the latter's rarity to attack young animals and far greater rarity to suppuration serves as a guidance, especially when the former is associated with the usual manifestation of umbilical sup-

puration or puerous urachus; traumatism is also permanent in the injured region.

Post mortems reveal evidences of general pyaemia. Commencing with the umbilicus, we find suppurative inflammation along its course, with thickening of the umbilical vein. Within the inner umbilical ring abscess formation is usually present, with thrombosis of the portal vein; the synovial membranes are thickened and reddened, the synovial fluid increased in quantity and opaque, which shows the presence of numerous streptococcus, upon bacteriological examination. The appearance of the articular cartilage will vary with the duration and degree of attack. When death occurs within two or three days of the onset, very little change may be noticed, but where the attack has been prolonged for weeks, extensive ulceration is usually present, frequently extending into the bone. About the affected joints purulent infiltration between the tendons and ligaments is usually extensive, foci of infection may be present in nearly all tissues of the body, especially liver, lungs, kidneys, muscles, and subcutaneous tissue. Evidences of pleurisy, endocarditis, and pericarditis are rarely wanting, with fatty degeneration of important affected organs.

Treatment.

The treatment in these cases is limited to its prevention. The proper disinfection and dressing of the umbilicus (navel cord) at the time it is severed prevents this trouble. It is the only preventative measure known to us. (Moore.) All authors lay great stress on prophylaxis, but where the disease is comparatively rare, or where colts are foaled in the absence of attendants, such measures are likely to be overlooked or applied too late; but where promptly and properly done, there is little or no danger. As previously stated, a neglected persistent urachus will always lead to this form of arthritis, such conditions demand prompt attention; the measures recommended are clamping or ligating the umbilical stump. We have not found this satisfactory. Others again resort to injecting the urachus with such irritant antiseptics as iodine, carbolic acid, and nitrate of silver solutions. These are excellent when carefully done, but are attended with danger if the anatomy of the parts is not accurately known. We have found astringents, externally, give the best results without risk.

Among the drugs most frequently resorted to when arthritis is apparent are salicylic acid, salicylate of soda, quinine, hyposulphite of soda, arsenic, various iron preparations with laxatives as, oil, salts, calomel, etc., giving surgical and antiseptic attention to the joints where suppuration occurred, yet with these our cases were tedious and unsatisfactory, the mortality varying between fifty and ninety per cent., those which did not die remained sickly and unprofitable.

The spring of 1906 was marked by severe loss among foals in parts of Ontario, one practitioner of our acquaintance having as many as twenty cases on hand at once. By his consent and in co-operation with the Pasteur Vaccine Company, Chicago, we placed ten 10 c.c. bottles anti-streptococcus serum in his hands for trial, giving him directions for his guidance. Out of the five cases treated, four made rapid and complete recoveries, the fifth, as he expressed it, was beyond all hope of recovery before the

serum arrived. In the spring of 1907, we had the pleasure of witnessing some very rapid and complete recoveries in typical and severe cases. Experience with it has taught us that large doses (10 c.c.) daily are necessary for a two to three weeks old foal. We have seen no advantage or disadvantage in dividing the quantity, giving 5 c.c. morning and evening. As soon as resolution is established, reduce the dose to half, or even less, throughout the illness. Where the disease is prevalent, it is advisable to give 5 to 10 c.c. immunizing doses, on eighth and fifteenth day which, with proper care of the umbilicus at birth, will effectually prevent the trouble. Our favorite remedy for persistence of the urachus consists in frequent applications of a saturated solution of alum and borax, to which should be added an amount of carbolic acid equal to two per cent. of the whole mixture. When the disease has been well established, before serum treatment is attempted and extensive suppuration about the joints has taken place, no time should be lost in giving exit to the pus at the most dependent parts of the abscess, the resulting cavity should be carefully flushed out with warm antiseptic solutions. Resulting enlargements may be lessened or dispersed with such absorbents as tr. iodine combined with daily friction. The patient should be kept under the best hygienic conditions, the mother should have equally good attention, with careful but generous diet.

Among cases so treated by us we will give details of two which represent both extremities in severity of attack:

No. 1. Grade filly. On the seventeenth day after birth, the owner noticed the foal was lame in left hock, which, upon examination, was found swollen and painful; suspecting injury, he consulted us. Local treatment was prescribed. The third day following, our attention was called to another suspected injury of the right hind fetlock. Our interest was at once aroused sufficiently to visit his farm and make a personal examination, when we recognized a typical case of pyaemic arthritis. The foal was very lame, gaunt, listless, and required aid to rise and suck. Very little outward manifestation of suppuration was evident about the umbilicus, yet the stump was hard and tender. 5 c.c. serum were given daily, which delayed the apparent rapid progress of the disease; the colt's appetite improved somewhat and slight general improvement was noted. On the fifth day following, a large amount of pus was evacuated from the hock, which did not involve the synovial membrane; about the same time extensive sloughing occurred about the fetlock, extending to the coronet. Two days later an abscess of considerable proportion appeared over the lumbar region, followed by a painful swelling of the left stifle, when we increased the dose to 5 c.c. morning and evening, improvement at once becoming apparent, resolution taking place sufficiently rapid in the stifle to prevent suppuration. The abscess on the back healed very rapidly, nothing eventful except a rapid recovery took place, the only trace of the disease existing being a slight blemish of the fetlock where sloughing was extensive; the foal has developed as well as its associates which escaped.

Case No. 2. Grade filly. Apparently healthy until the third week after birth, when it suddenly and without visible cause developed a painful swelling in one stifle; our

diagnosis being pyaemic arthritis, we at once resorted to serum treatment, lameness and swelling increased during the delay in procuring serum, but disappeared as suddenly as it came after three days' injection leaving the colt as thrifty as its mate.

Summary.

Pyaemic arthritis is a disease of young animals, due to infection gaining access to the system through the navel wound coming in contact with soil, dirty floors or soiled bedding, shows itself by suppuration of the navel followed by general symptoms of illness with lameness and suppuration of the affected joints, which if not checked early, terminates in death or else leaves the patient sickly and unprofitable. Preventative treatment consists in disinfection and protection of the navel at the moment of birth, providing the animal good hygienic quarters the first few days of its life, and where infection has already taken place an early resort to antitreptococcal serum coupled with thorough disinfection of parts involved, good general care, with well regulated generous diet of the mother.

JNO. SPENCER, Veterinarian.

Virginia Agricultural Experiment Station,
Blacksburg, Virginia.

COLANTHA 4TH'S JOHANNA 1849 A. R. O.

THE HOLSTEIN-FRIESIAN QUEEN OF ALL DAIRY COWS.

Official Records:

Sufficient fat for 32 lbs., 14 ozs. commercial butter in 7 days; 129 lbs., 5 ozs. in 30 days; 243 lbs., 2 ozs. in 60 days; and 20 lbs., 2.5 ozs. in 7 days, beginning the record 339 days after freshening.

Semi-Official Record:

Sufficient fat for 1,164.63 lbs. commercial butter in 365 days; 27,432.5 lbs. milk in the same period of time.

Colantha 4th's Johanna, 8 years, 1 month, 19 days old at date of last calving, is owned by Mr. W. J. Gillet, Rosendale, Wis., president of the Wisconsin Dairymen's Association and ex-president of the Holstein-Friesian Association of America. Mr. Gillet has for many years bred for form as well as for function, and the wonderful records made by this great cow bred by him show that the combination is not incompatible.

Both the official and the semi-official tests of Colantha 4th's Johanna were made under the supervision of the Wisconsin Agricultural College, and Prof. F. W. Woll, the officer in charge of tests of dairy cows in Wisconsin, in referring to the early official part of the work of this cow, wrote as follows: "Wisconsin can now boast of possessing the champion butter fat producing cow of the Holstein-Friesian or any other breed. Colantha 4th's Johanna, bred and owned by W. J. Gillet, Rosendale, Wis., recently finished an official test, begun forty-nine days after calving, in which she produced in seven consecutive days 651.7 lbs. milk containing 28.176 butter fat, equivalent to 32.86 lbs of commercial butter, thus placing her at the head of the list of cows with 7-day official records. She also captured the 30-day record by her production of 110,833 lbs. of butter fat, equivalent to 129.3 lbs. of com-

mercial butter, as well as the 60-day record by producing 208.398 lbs. of butter fat, equivalent to 243.13 lbs butter. The production of Colantha 4th's Johanna is certainly phenomenal, and will, therefore, be likely to be discredited by many who do not know much about the development of modern dairy cows or about the system of official testing.

Concerning the cow herself, at the close of her 63-day official test, Prof. Woll wrote: "Colantha 4th's Johanna dropped a fine, strong bull calf on December 19, 1906. Her feed during the main 7-day test was about 30 lbs. silage made from well-eared and matured corn 10 lbs. clover hay, 30 lbs. sugar beets, 21 lbs of a mixture of equal parts by weight of bran, ground oats and gluten feed, with 3 lbs of linseed oil meal. This was her maximum feed at six weeks from calving, the allowance of grain having been gradually increased to this amount from 12 lbs. at the beginning of the test. According to standard reference tables this ration contains about 40.88 lbs. dry matter, 4.94 lbs digestible protein, 24.44 lbs. digestible carbo-hydrates and fat, the nutritive ratio being 1 to 4.9. At the time of my visit to the farm, the cow had been eating a daily ration like this for a week, and one consisting of only a few pounds less grain for a period of several weeks, and she was ready for her feed at every meal time. Her bright eyes and soft, glossy coat testified that she was in the pink of condition and apparently rather enjoying herself. Her production on the last day of the 60-day test, of 101.5 lbs. milk containing 3.611 lbs. fat, also furnishes evidence that she was not played out by the heavy feeding and phenomenal production during the preceding two months.

That Prof. Woll was quite right in saying that Colantha 4th's Johanna was not played out at the end of the 63-day official test, made during the early part of the lactation period, is shown by her wonderful production, computed semi-officially for the year, of 27,432.5 lbs. milk containing 998.26 lbs of butter fat, a production so very large that it cannot be fully comprehended without some analysis. An 8-gallon can of milk contains 67 lbs., and this cow produced over 409 such cans (13,063 quarts), which (cans included) would weigh about 14 tons and make very respectable loads for 14 teams. During the past year the average price of such milk in the cities and villages of Wisconsin has been 6 cents per quart, and at that price the milk, if sold, would have brought \$783.78, or about as much as the milk from four average good utility dairy cows.

It will be admitted by any skilled butter maker that 998.26 lbs of butter fat is sufficient to produce 1,164.63 lbs. of the best of commercial butter, and the high price of grain feeds has made skim milk worth fully 20 cents per 100 lbs. The average wholesale price for creamery butter in the Elgin district has been above 28 cents per pound, and at that price the 1,164.63 lbs of butter would have sold for \$326.10, while the 26,000 lbs of skim milk and butter milk was worth \$52 more, making a total, if butter were made, of \$378.10, while cheese would have been still more profitable. Thus this great Holstein-Friesian cow has produced for every day of the 365 days she was under test an average of 75.16 lbs milk containing

2.736 lbs. of butter fat, showing an average of 3.64 per cent. fat. This average daily production of milk was equal to nearly 36 quarts, and the fat contained in it would have made 3.19 lbs. of the best commercial butter. What breed but the Holstein-Friesian could produce such a cow?

VIRGINIA STATE DAIRYMEN'S ASSOCIATION.

This Association which has now been incorporated with T. O. Sandy as president, Westmoreland Davis as vice-president, and Prof. W. D. Saunders as secretary and treasurer, is making application to the General Assembly for an appropriation of \$7,500 to enable it to develop greater interest in the production of dairy products in the State, and to have supervision over the sale of feeds for stock in the State. The necessity for work in this direction is very urgent, as at the present time 85 per cent. of the dairy products consumed in the State are brought into it from outside the State. Even the comparatively small quantity of farmers' butter made in the State is to a large extent bought up by the butter renovators and carried out of the State, and then returned in the form of renovated butter, or oleomargarine. The quality of this farmers' butter is usually of so low a grade that it cannot be sold in its original condition in competition with western and northern creamery products, except to a very limited extent and at a very low price. There is a wide field for the Dairy Association to educate the farmers of the State in the making of high grade butter, and if this is properly undertaken it cannot fail to result in great profit to our farmers. The natural conditions in the State favor the building up of a great industry here, and it is to be hoped that the Legislature will give the appropriation asked for. The officers of the Association are practical dairymen and good business men, and the affairs of the Association could not be in better hands to carry on this educational work. The necessity for the exercise of supervision over stock feeds is also urgent, as at present Virginia is practically the dumping ground for all kinds of rubbishy feeds which are not allowed to be sold in other States. We hope our readers will fail to ask their representatives in the General Assembly to support the application for an appropriation for this Association. Other States make large appropriations for the advancement of the dairy interests, and find it to their advantage to do so, and we should not fail to do likewise.

As showing what even a nut tree is capable of yielding as an investment, just ponder over these figures from Raleigh, N. C. The tree (a pecan) is about thirty-five years old; it commenced to bear when about twelve years old, and has since borne a crop every year. In the fall of 1905, the crop equalled 300 pounds; in 1907, it amounted to more than 400 pounds. Estimating the selling price at twenty-five cents a pound, 400 pounds would bring \$100, which may be reckoned as 10 per cent. on \$1,000, or 5 per cent. on \$2,000. A tree resembling this one is a valuable asset to any man.

The Poultry Yard.



THE SOUTHERN PLANTER LOVING CUP DONATED ANNUALLY TO THE VIRGINIA POULTRY ASSOCIATION, WAS WON THIS YEAR BY MR. J. DUNSTON, LORRAINE, VA., WITH HIS SPLENDID WHITE WYANDOTTE COCKEREL AS THE HIGHEST SCORING MALE IN THE AMERICAN CLASS. LITTLE MISS DUNSTON CLAIMS TO OWN THE WINNER AND, JUDGING BY THE PHOTO, WE PRESUME SHE DOES.

POULTRY NOTES.

In the notes for January I tried to show some of the advantages the Southern poultryman has over his brethren in the North and Northwest. In this article I will try to explain why the conditions here in the South lack that element of thrift and profit that is so characteristic in the North. Here in the South a hen is a hen, a fowl a fowl. Very many farmers think one is just as good, as valuable, as the other. No attention is paid to the improvement of the flock of fowls. The poultry is looked upon as a sort of scavenger and is expected to forage and steal enough to live through the winter months, lay a few clutches of eggs in the spring, raise a brood of eight to twelve chicks and go to market in September and October. Occasionally neighbors "swap" a setting of eggs, that is they exchange one batch of mongrel eggs for another batch of similar eggs. This is improving the stock on the principle of the colored boy who exchanged a pair of head lice for a pair of body lice in order to have a greater variety. I have been breeding poultry for many years and have met with every kind and character of men and women from the one that calls you a chicken crank, but is very ready to exchange a "settun" of "aigs," to the wise man who insists that the "ruster" he bought in the market for thirty cents is just as good as the one you just brought home at a cost of \$15.00. It is this lack of knowledge of the real difference between standard bred fowls and reasonably good care and feed, and the common mongrel hen, and no care and feed, that explains why the Virginia hens lay but five dozen eggs per year on an average. This is true not only of the hen but the pig,

the steer, anything in fact that requires good blood and breeding with good care and feeding for quick development and consequently good profit. I have seen many pigs slaughtered within the past year that were eighteen to twenty-four months old that weighed less than 200 pounds net. I saw a beef slaughtered a few days ago that was fifty-two months old that weighed net 342 pounds. A well-bred pig, with good feed will make 250 pounds net at eight months of age and I have seen "baby beef" cattle in the Northwest make 600 pounds net weight at eighteen months old. A good Jersey cow will easily make three pounds of butter per day but I personally know of cows in Hanover county that are not making one pound in three days. There are exceptions, but I am giving facts of the average. I cannot paint the warm, rosy tints of the picture without the hard background of real facts and conditions to put it on.

A careful study of the experiment conducted last year with a flock of Leghorn hens shows a net profit, at market price for eggs, of nearly 80 per cent. I valued these hens at \$1.00 per hen for feed and they returned \$1.62 per hen net. I consider this much better than money in bank at 4 per cent. Yet many farmers prefer to put their money in bank at 3 to 4 percent, rather than invest it in good stock and buildings for their farms. This enables the banker to wear fine clothes, ride in an automobile with a plate glass in front of his face to keep the dust out of his eyes whilst the farmer is content to wear corduroy, ride in his old cart with a beautiful pair of long ears in front of him to fan his parched and furrowed brow.

Every good farmer knows that good stock of any kind,

properly cared for, pays a good profit to the owner and I do not know of any line of live stock that will pay a better profit than good poultry.

This brings me to consider the cost and best method to pursue to improve our flocks. One way is to buy a few good males and breed up the stock in hand. This, if judiciously done and continued for a number of years, will give fairly good results. Always buy males of the same breed from reliable breeders. A better way is to buy a dozen good hens, yearlings preferred, an extra good cockerel of the same breed, sell every mongrel and hatch these eggs. Select all your best pullets, procure a good yearling cock bird or two and your foundation is laid. Then study that breed and use only the best each year for breeding purposes and in a few years your flock will be a source of pleasure and profit. The best way, I believe, is to buy eggs of the breed you may select and fancy and hatch them then sell all your mongrel stock, select your best pullets get a good yearling cock or two and you will be fairly started at nominal cost. When buying eggs be careful to buy from a reputable breeder. Go and see his flock if possible. Avoid buying from a breeder who advertises great things. Three hundred egg strains, all the prize winners at all the big shows, twenty-five varieties land and water fowls, etc., etc. Buy from a breeder who has one or two breeds carefully bred for standard utility birds, who will guarantee a good per cent. of fertile eggs and chicks from them of pure breeding. Do not expect every chick to be a prize winner. If you raise fifty chicks from 100 eggs and if thirty of them are good enough to keep you will be fortunate. Some years ago I bought 200 eggs at a fancy price from a man who advertised eggs from stock direct from a noted breeder. The eggs and stock were very unsatisfactory and upon investigation I learned that this noted breeder had sold 200 of his culls to a huckster and this man bought the lot at eight cents per pound. The stock was from the noted breeder as advertised and were the worst of the culls out of a flock of 1,800. When two or more breeds are kept the utmost care and vigilance is required to keep them pure. I have been asked many times, how long after yarding, eggs will be pure from hens that have been running with a promiscuous lot of males. I believe I have answered this query by saying three months. I wish to revise this, if I said so, and now say, never. I consider a hen that has been running with mongrel males or males of any other breed, for any length of time, ruined for all time as a breeder. I believe that it is absolutely necessary to keep each breed separate, strictly so, from the time the pullets are half grown until their usefulness as breeders is past. Many of those twenty-five variety breeders allow all their various breeds to run together until the breeding season begins then they yard them for a few months, then break up their pens and allow them to run together again until the next season. This will explain why so many of them go out of business in a few years. If I have two or more breeds I keep them separate all the time and if a hen gets out of her yard she is promptly converted into chicken pie.

Highland Springs, Va.

CAL HUSSELMAN.

BETER PRICES FOR POULTRY.

Planning for Larger Flocks.

Editor Southern Planter:

I have tried to point out to your readers in the various letters written within the past year, that the condition of the poultry market was constantly becoming more favorable to the breeder of heavy poultry. This is a new situation, for during the many years in which I was a regular space holder in the Center market in Washington, D. C., retailing the products of our own farm and dairy, I could never convince myself that any of us who sold large fowls for the table were very well paid for the grain which they had eaten. The laying breeds seemed to pay quite well under ordinary conditions, but my constant warning to my city acquaintances who would rent suburban property and start out to make a fortune in poultry, was that they could not afford to buy grain in the Washington market or in the country nearby, to raise fowls to sell by the pound or by the dozen in this same market, and many a man has suffered because he would only learn this by experience. At the broiler or frying size almost any chicken which has been well fed and rapidly grown can be sold at a profit, but the growth from four to nine pounds is made at a very considerable cost.

In those days from 1888 to 1896 we had one standard price for all our surplus stock of Barred Plymouth Rocks. The cockerels were \$1.00 each and pullets \$1.25. Occasionally a dozen, not the best, sold for \$10. We always had a coop of them on our stand or in the wagon and if they were not sold at this price they went home till next market day.

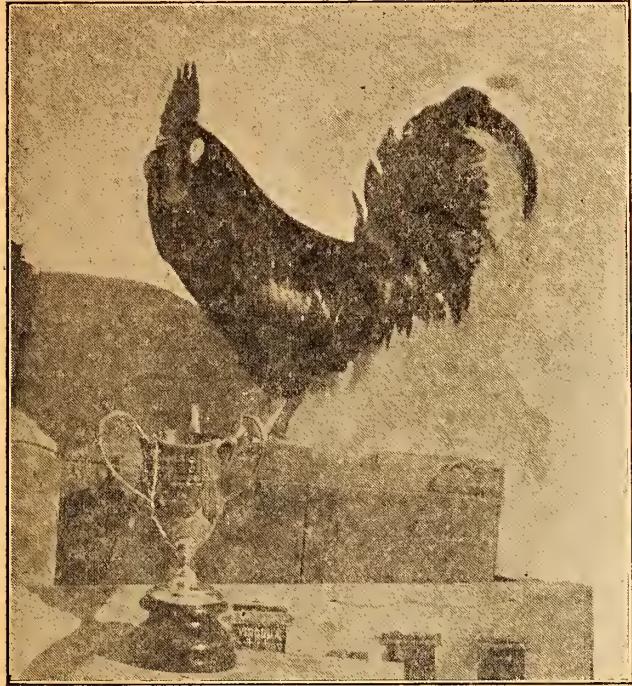
Just once in all the years I drove the market wagon did I know that the purchaser of one of these fowls intended to put him on the table. This was a beautiful youngster weighing perhaps eight pounds which was paid for and ordered taken to a certain butcher for delivery at a given number. As I hauled him to the butcher he remarked, on looking at the address, "That is for Senator D—." I described the purchaser and he said, "That was Senator D— himself." Of course a dollar did not look as big to a Pacific coast senator as it did to a Virginia farmer boy, but it was an unheard of price for a table fowl among the farmers and hucksters on the retail line.

But how times have changed! We are still breeding the same large strain of Barred Plymouth Rocks, and a few days ago I made the annual inspection of every hen in the flock, handling each one over carefully to discover defects which should disqualify her for breeding purposes. I rejected six which will go by the pound for what they will bring. Three of them have been sold dressed, with the crop removed, at 17 cents per pound, not to senators, but to government employees at salaries of \$1,600 per year or less who are quietly living within their means and doing no elaborate entertaining. At this rate the three brought respectively \$1.45, \$1.35, and \$1.10. To be exact, the largest weighed with crop removed eight pounds, eleven ounces, and the smallest six pounds, nine ounces. These hens had no special stuffing or forced feeding, just hard corn and free range on the old home

farm where they are not yet practicing the dry mash feeding which I have been trying for a year past with excellent results.

Last March large hens of this class sold for 17 cents a pound at wholesale alive, and there have been days between January 1 and January 15, of this year, when they brought 15 cents a pound.

My father-in-law has raised White Leghorns exclusively almost as long as I have bred Plymouth Rocks, and I believe they will lay more eggs with less care than any fowls I have ever seen. Just leave the feed within easy



First Prize Single Comb Brown Leghorn Cockerel, Virginia Poultry Show, Richmond, January 9-16, 1908, Wittman, Judge; owned and exhibited by S. Raspberry Hill Poultry Yards, Richmond, Va.

reach and they do the rest. But they are so uncontrollable and so destructive to any planted crop which a hen will eat, that the average farmer will hardly tolerate them unless he has a special egg market. When the Leghorn flock becomes too numerous the surplus amounts to very little by the pound, and for this reason a heavier fowl is to be preferred on a great majority of farms.

Planning for a Larger Stock.

Beginning with this season we propose to increase our flock of Barred Plymouth Rocks as fast and as long as it proves profitable to do so, or until it becomes as large as the family of six children, ranging now from twelve years down, can attend to.

If this venture is to succeed we need three things:

First. Healthy, vigorous stock from all inherited disease or weakness.

Second. Large size, quick growth and good table quality.

Third. The largest egg production to be had without losing other qualities.

In the first and second points our own flock bred for thirty-one years in one ownership without a run of conta-

gion of any kind can hardly be excelled. As to egg production, while it is no trick at all to exceed the average Virginia record of sixty eggs per hen per year, yet I have believed that we lost something by breeding such a very large strain, and last season I bought smaller males from a local flock of good layers, and while I have raised some enormous pullets which weigh nine pounds apiece now, yet a majority have laid at seven months old and the flock as a whole is doing better winter work than for years. Still we are not satisfied with any laying strain which is not the best to be had, and so I have purchased two cockerels from the developed strain at the Maine Experiment Station.

These birds both have eight generations of 200 egg hens in the male line and one of them is from the egg of a hen who herself laid 215 eggs in one year, and he is one of the largest birds the flock produced. He was selected for me by Professor Gowell with special reference to size of frame and promise of weight. These two males have cost me over \$14, and while I expect to raise some of the best laying Plymouth Rocks in the State from them, they are very much smaller and inferior in color to any of the twenty cockerels of my own strain which I shut up to give the newcomers possession.

One of these Maine birds I will mate with about twenty females averaging eight pounds or more in weight, chiefly old hens. The other will be put with a flock of my best laying and most promising pullets. These flocks will be given free range on alternate days.

On my father's farm the house and barn are so far separated that fowls kept at the two places seldom intermingle. At his barn I will colonize some pullets of last season's breeding which are so fine boned that I will not risk reducing the size any further by mating them with a Maine cockerel, but will use one of the largest of my own. At father's house we will have a flock of our old line bred hens and pullets mated to the very choicest cockerels of my present crop.

This will give us four flocks of about twenty each, so separated that we can, by raising chickens in different parts of the farms, make up matings for another season of fowls hardly related at all.

I have written thus fully that your readers may see what a practical breeder who is not in the show business is willing to pay for practical stock of just the kind he needs. We may not get our money back in eggs or stock at fancy prices, for we will do little if any advertising this year. We have no hens nor pullets for sale. Ours are all good enough to keep! We will have eggs to sell for hatching, but only when we cannot find setting hens. Ours are all good to keep! I wish I could hatch every egg laid, beyond what we need for the table. Some few of our neighbors have already placed orders for eggs from the Maine cockerel's pens. If everybody who has written to ask about cockerels had purchased I should have none left now. As is I have about twenty which will sell dressed for \$1.00 apiece before spring so no one need ask me to box and ship them at that price. There is very little margin in growing a cockerel to eight pounds or ten pounds for \$1.00.

W. A. SHERMAN.

Vienna, Fairfax Co., Va.

POULTRY KEEPING ON A HALF-ACRE LOT IN A CITY.

A Profitable Flock.

Editor Southern Planter:

On the first day of January, 1907, I commenced with a flock of 192 head. On the thirty-first day of December, 1907, I had on hand 245 head. The eggs laid during the year by the flock numbered 10,789. The income from the eggs amounted to \$304.51. I sold chickens to the number of 193 during the year. From these sales I realized \$140.75. I sold 25 barrels of manure made by the flock for the sum of \$10.00. The total income realized from the flock in the year was \$455.26. The expenses were, for feed, \$118.16; other expenses and depreciation on buildings, \$49.68, making a total of \$167.84. The value of the increase on the flock on hand December 31st, at 50 cents per head, is \$26.50.

SUMMARIZED THE ACCOUNT STANDS:

Proceeds of eggs, stock and manure sales.....	\$455 26
Value of increase in flock.....	26 50
Total	\$481 76
Less expenses	167 84
Net profit.....	\$312 92

The feed purchased for the year cost on the average 50 cents per hundred.

Newport News, Va.

R. H. HARRIS.

THE WHITE WYANDOTTE.

Editor Southern Planter:

Nearly every one admires a flock of pure white chickens on a farm, for there alone, away from the soot and dust of town and city, they show to the best advantage, their snowy plumage being a pleasing contrast to the green summer covering of mother earth. As all know, some breeds are best suited for eggs only, while the large breeds suit those who cater to the brooder and roaster trade. What the farmer wants is a breed that will bring him an income twelve months in the year; one that will mature quickly, reaching to the broiler size in ten weeks (one to one and one-fourth pounds) a good forager, but will stand confinement when necessary; a fowl that is neither a non-sitter nor an "everlasting sitter," but one that is ready to take a brood in the early spring, or if broken from broodiness, is ready to lay in a very short time; a low rose comb that will not freeze (if they should be left in the trees the coldest night) and best of all, one that will fill the egg basket when the snow is on the ground and the thermometer below zero.

One who is thinking of buying a pure-bred fowl will find that the White Wyandotte will fill his every need. They were produced by Americans for Americans, and have met the American's demands. In various experimental tests they have headed the list both in number of eggs laid and in cost of producing the eggs. Their heavy coat of feathers protects them from the cold climate, and thus they do not require as warm houses as do some of the smaller breeds. Their clean, yellow legs deep, full breast, yellow skin and white feathers make

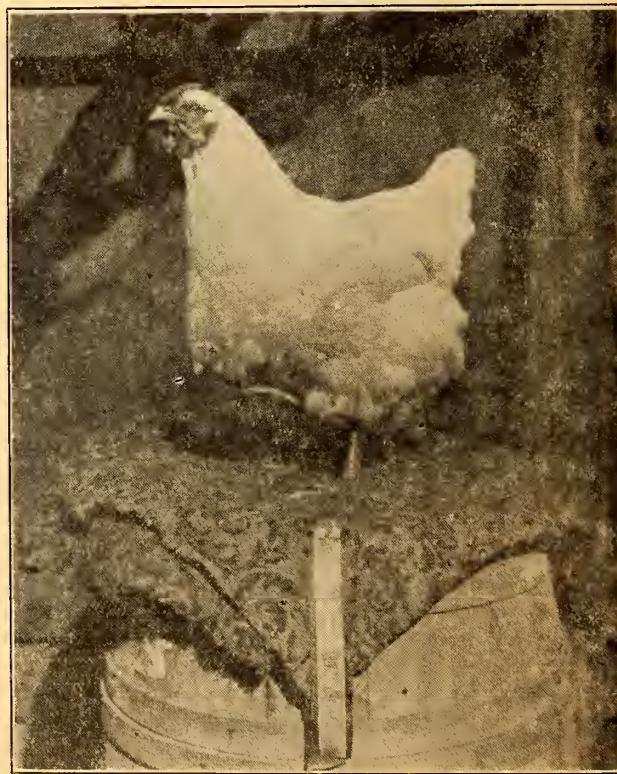
them an ideal market fowl. One point in favor of the yellow legs is that it is a proof of stamnia, indicating perfect health, and one in favor of white feathers is that your dressed fowls are clean of the black pin feathers that you can neither pull nor wash from the colored birds.

The White Wyandotte will fill the egg basket as full as the fullest and at the same time produce more of the finest and choicest meat at less cost than any breed in existence. So much for the utility side.

AN OLD SUBSCRIBER.

ANNUAL SHOW VIRGINIA POULTRY ASSOCIATION.

The annual exhibition of poultry, pigeons and pet stock, held by the Virginia Poultry Association at Richmond, January 9-15, 1908, was one of the best ever held in the entire South. The handsome new coops purchased this season by the Association were a wonderful help to the visitors in getting a fine view of the specimens on exhibition as well as giving good light and pure air to the fowls. The classes in all breeds were even more than filled, in many instances, the number of entries in competition



First Prize White Wyandotte Hen. Virginia Poultry Show, January 1908; bred and exhibited by Cedarbrook Poultry Farm, R. F. D. 3 Richmond, Va.

in a single class would contain twenty-five to thirty-five single fowls, and in such classes many a fine specimen was left out of the winners. The exhibit of Plymouth Rocks was a grand one. In the Barred, Mr. Leslie H. McCue, of Afton, Va., and Mr. Charlie Brown, of Cartersville, Va., were the leading winners. In Whites, R. W. Haw, R. F. D., Manchester, Va., showed some excellent

specimens, as did Burke's Garden Cattle Co., of Burke's Garden, Va., and Miss Pusey, of Richmond. In Buffs' display went to Sysonby Gardens, of Petersburg, Va. In Wyandottes, competition was never keener. On Whites, honors were well divided between J. F. Dunston, Lorraine; W. D. Saunders, Richmond; R. R. Taylor, Beaver Dam. One lot belonging to Mr. A. S. Greene, of Burke's Garden, which arrived after judging was over, were superb fowls, and had they been in time would have been at the head in winnings. Mr. Dunston won the Southern Planter cup for best cockerel in the American class. In Columbians, a big class was shown by Mr. A. S. Brinsen, of Manchester. A good class of Buffs shown by Mr. George W. Osterhout, of Bedford City, and Moorward Poultry Farm, of Wiseville. In Silver Laced, honors were divided between Mr. J. V. Pomeroy, of Graham, N. C.; O. M. Cockes, Ellerson, Va., and Ellerson Poultry Yard, with Mr. Pomeroy with general best display and leading. In Golde and Partridge, Ellerson Foultry Yard, Ellerson, Va., showed good classes, carrying all honors there being no competition. In Rhode Island Reds, a good showing of both Single and Rose comb. In Single there was a superb showing by F. S. Bullington, Richmond, who won the Red Club specials and the cup offered for best display. Mr. Bullington refused a good sum for his winning cockerel; other honors went to Mr. J. J. Jones, Chestnut Hill; Ellerson Poultry Yard, and B. L. Woodward, all showing good ones. In Rose comb, best display and club specials went to W. D. Sydnor, of Barton Heights, and other good ones were shown by Mr. W. A. Shook, McGaheyeville; J. A. Page, B. L. Woodward, and W. F. Gaines.

Langshans brought out a good class of blacks, shown by Mr. A. M. Black, Tazewell, who was the leader and won the Purina cup for best bird fed on Purina feed. Messrs. J. C. Adams, of Bristol, Tenn., and J. C. Wenger, of Dayton, Va., also showed excellent strings, both getting into the awards. Leghorns were easily the largest display in the show, Whites having large classes, even greater than were shown at Jamestown show. Leading winners were Messrs. S. S. Stansbury, A. J. Warren, J. W. Snellings, B. H. Grundy, Jr., J. A. Ellett, and H. A. Sager, of Richmond; Mr. Stansbury captured three of the blues, and the special cup for the best display. In browns, also a great showing. Principal exhibitors, H. M. Wilkerson, A. J. Warren, Strawberry Hill Poultry Yard, L. J. Myers, D. Murrell; Mr. Williams, of Strawberry Hill won first cockerel, first, second, third, and fourth pullets sweeping them. Also, winning cups offered by the Leghorn Specialty Club and Breeders. First cockerel and second cockerel went to Mr. Wilkerson—both grand birds. Warren nearly cleared up the hens with first, third, fourth, and fifth; also winning first pen. Buffs one entry, good, by Mr. J. N. Coffman, Edinburo. In Black Minorcas, all blues went to Mr. J. W. Snelling; other prizes divided between B. H. Grundy, W. McDowell, and J. W. Robertson. In Orpingtons, Mr. B. S. Horne, Keswick, won four of the five blue, Mr. Carter getting first and second pullets on Buffs. In Whites, the usual good showing by Mr. F. S. Bullington, who won all first and the special prizes. Miss C. L. Smith, of Croxton, second cockerel and second hen on two good birds. In games there was excellent quality, pro-

nounced by the judges as "topnotch," shown by Mr. B. J. Pleasants, of Ashland. There were also classes of Andalusians, Light Brahmas, etc., of good quality, and a strong pen of Black Cochins, shown by Mr. W. M. Carroll, Lynchburg. Turkeys brought out good classes in Bronze and White Hollands. In Bronze, a forty-five pound Tom was shown by Mr. Charlie Brown, and easily won the blue with his mate. Mr. Brown also won the second pair and first pair young. Burke's Garden Cattle Co. captured the balance. White Holland, Mr. Dunston, Lorraine, won first cockerel first hen—good, big birds. Mrs. S. Y. Gilliam Church Road, Va., won the blue on young pair. Mr. R. R. Taylor, Beaver Dam, captured second on both old and young. In Ducks, Pekins brought out a good string, leading prizes, however, all went to Mr. Hugh Skipwith, with others to R. R. Taylor and Burke's Garden Cattle Co. There was also a good strong showing of Pigeons. There was an excellent display of supplies, incubators, brooders, etc., by Diggs & Beadles, and roofing by Smith-Courtney & Co. In all, it was the best show ever held in the South. Complete list of awards will be found in the advertising section.

In every one hundred pounds of milk there is one-half pound of salt. To make this amount of milk the cow requires this quantity of salt the same as the laying hen requires lime. The food which the cows consume contains but a small proportion of this salt, and unless it is furnished them, they must cut down on their supply, so as to conform to the amount of salt they get. Be careful that you do not lose many pounds milk this winter trying to save a few ounces of salt.

When we all get silos so that we can have summer feed the year around, and barns so warm, light and well ventilated that the cows can have June weather in winter, then we may hope to duplicate June results twelve months in the year. Then many of the so-called scrubs will be among the prize winners, and the average production per cow will no doubt be doubled.

A MAGNIFICENT INDUSTRY.

Last year a total of 55,028,398 animals reached the thirteen leading markets of this country, and that was 494,398 less than went to market in 1906. It is hard to realize the extent of our live stock industry. Figures of such magnitude are almost beyond comprehension; but if these animals were in solid rank, allowing six feet for each animal, with no space between ranks, they would make a column twenty abreast from the Atlantic to the Pacific. But this gives only a faint idea of the magnitude of the live stock industry of this country, for these animals are merely the surplus, the annual product marketed. Imagine, if possible, what an industry it is which turns off a surplus like this every year. And yet this is only a part of the surplus. No account is taken of the vast number of animals sold to local markets or used on the farm. Truly a magnificent industry and one developed in a comparatively short period.

The Horse.

THE HORSE.

NOTES.

By W. J. Carter (Broad Rock).

Among the native born Virginians residing in the grand old Commonwealth up to the age of manhood and then removing to other States and attaining distinction few have become more widely known than Major P. P. Johnston, now of Lexington, Ky., where he has long been prominent as a breeder of both thoroughbred and trotting horses, and in legal circles as well, having been a former Judge of the Circuit Court. Major Johnston has also been president for twenty years of the National Trotting Association, the chief tribunal of the light horse world. Governor Wilson, the new executive of Kentucky, has appointed Major Johnston to the responsible position of Adjutant General of the State. Commenting on this, Mr. Hamilton Busbey, of New York, who ranks among the ablest turf and editorial writers this country has produced, offers the following richly-merited tribute to Major Johnston in *The Chicago Horseman*:

"After the close of the Board of Review meeting I was at a private dinner with President P. P. Johnston, and he then had no thought of returning to the profession of arms. He was thinking of an early start for Florida waters and of the fish that would come to his landing net. When he arrived in Lexington the tobacco growers strife was on, and the new executive of Kentucky, Governor Wilson, conferred with Major Johnston, and appointed him Adjutant General of the State. The Governor wanted an old soldier and a man of ripe judgment in command of the State troops in an hour of emergency, and Major Johnston deferred his holiday jaunt to temporarily accept an important commission. It is as much a question of diplomacy as fight, and I think the diplomacy will win. Major Johnston was president of the Kentucky Trotting Horse Breeders' Association, and was a member of the Board of Appeals of the National Trotting Association prior to his election as president of that important organization of discipline. He has been tried by fire in more ways than one, and has steadily risen in the estimation of the discriminating. He was born in Virginia in 1840, and was a Confederate soldier in the great war of the American continent. Governor Willson, who is not friendly to an overdose of racing in the interests of bookmakers, has made Major Johnston a member of the Kentucky Racing Commission, and this means that a strenuous effort will be made to curtail the running meetings at Louisville and Latonia. Major Johnston, who is a breeder of trotters and thoroughbreds, may be depended upon to act with those who seek to promote the best interests of the breeder and to reduce the great speculative shadow which hangs over jockey club tracks."

"*The Horseman* stands for all that is clean and honest in the business and sport of harness racing, which it has done more to foster and improve than any other newspaper. Our principles are those of true journalism, and they pervade the humblest employee on our staff. We have no individual interests to serve, nor do we, with fair words and under guise of promoting the general wel-

fare, exact a revenue from every available source. It is our dominating aim to make our publication the support and reliance of all—the horse, his owner and his friends.

"During the past year we have materially added to the number of our readers, and every month, every week, every day has shown an increase in our circulation, but we want to reach every possible subscriber, and we hope our effort will avail.

"For the sum of one dollar breeders may nominate their mares for the 1908 Futurity of *The Horseman and Spirit of the Times*. This stake has a guaranteed purse of \$15,000, which will be raced for in three divisions: \$10,000 will be given for three-year-old trotters; \$3,000 for two-year-old trotters, and \$2,000 for three-year-old pacers. In addition there will be a cup valued at \$500 for the winner of the three-year-old trotting division, and a purse of \$200 for the nominator of the dam of the winner. What makes this the most liberal and the richest newspaper Futurity ever given is the fact that all the money received from entrance and starting fees above the guaranteed amount will go into the stake as added money. There will be absolutely no percentage of profit to the promoters except the good will which may result from the promoting of such a liberal and rich stake.

"The amount to be raced for, not less than \$15,000, is guaranteed by the Chicago Horseman Newspaper Company, of which Daniel J. Campau, of Detroit, Michigan, is the president."

The immense plant of the Southern Yards Corporation since it was opened for business early in the new year has been one of the sights of Richmond. The building has the capacity to shelter over 3,000 head of horses and mules, which are all unloaded under cover, as a spur track of the R., F. & P. R. R. runs the entire length of the north side of the mammoth plant. An eighth of a mile track extends right through the building, and forms an ideal place for showing horses at speed regardless of weather, a convenience to be appreciated by buyers and sellers alike. Auction sales will be held on Wednesdays and Thursdays throughout the year, while special auctions of trotters, pacers, high-acting harness and fine saddle horses will be held each spring and fall. The Richmond concern absorbs the big plant of the Smyth Bros. McCleary-McClellan Live Stock Company, of Norfolk, whose principal officers, the Messrs Smyth, A. L. McClellan and H. E. Kline, rank among the best known and most reliable men in the Southern horse and mule trade.

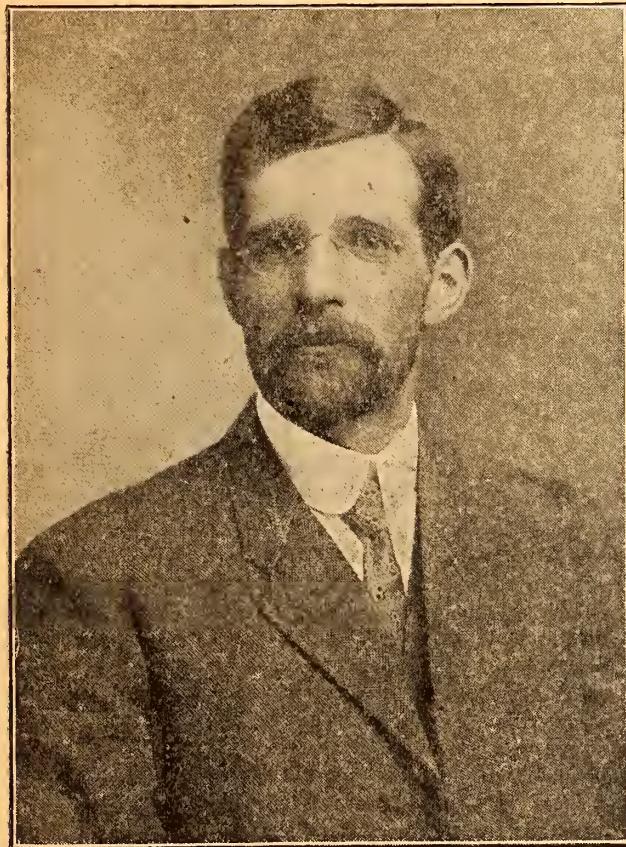
William L. Bass, who has been identified with the harness horse interests of Richmond and vicinity for many years, is now located at the State fair grounds track, where he has opened a public stable, and is wintering about a dozen head of trotters and pacers. During his career Bass has had more or less to do with nearly every trotter or pacer of any note sent out from Richmond, among his pupils being Miss Nelson, 2:11 $\frac{1}{4}$; Roster, 2:12 $\frac{1}{4}$; Firewood, 2:17 $\frac{1}{4}$, and a score or more with slower records.

Miscellaneous.

THE NEW DIRECTOR OF THE VIRGINIA STATE EXPERIMENT STATION.

We have pleasure in publishing the likeness of the Director of the Virginia State Experiment Station, Dr. S. W. Fletcher, who has recently been appointed to fill the position left vacant by the appointment of Professor Soule to the Presidency of the Georgia State College.

Dr. S. W. Fletcher was graduated from the Massachusetts Agricultural College in 1896 and was at once appointed Assistant Professor of Horticulture in that College. From there he was appointed to an Assistant Professorship in Cornell University, New York, where he took



his Master's and Doctor's degrees. From Cornell he went to the Washington State College as Professor of Horticulture, and from thence to the West Virginia University. From this latter College he was appointed Professor of Horticulture in the Michigan Agricultural College, where he remained until receiving his present appointment. From this it will be seen that he has had experience both North and West and comes to Virginia with knowledge gained in many different fields. The fact that he took his Master's and Doctor's degrees at Cornell and taught there is a strong guarantee that he is a fully competent man to fill his present position, as Cornell men take a high stand in the scientific educational world. He is the author

of two books—"Soils," and "How to Make a Fruit Garden"—published by Doubleday, Page & Co. We extend a hearty welcome to Dr. Fletcher, and trust that his work at the Station will justify his appointment. It is somewhat of a departure from precedent to appoint a horticulturist to the position of Director, but there does not seem to us any reason why this departure should not be made when you can secure a man who has had a training in such a college as Cornell, and especially was it safe to try the experiment at Blacksburg, where the live stock side of farming and experimentation is in the hand of so competent a man in this branch as Dr. Quick, and where there is also an agronomist on the staff, a professor of this branch having recently been appointed. There are Directors of Experiment Stations in one or two other States who graduated in horticulture, and we have not heard that there is any fault to find with their work. We have a great horticultural and fruit industry here which is entitled to have its interests cared for and represented strongly at Blacksburg, and there is much experimental work which the new Director can imitate and carry on for the advancement of this industry. We shall expect to see him "get busy" in this direction and hope shortly to be able to let our readers hear from him.

THE WORK OF THE AGRICULTURAL SCHOOL IN THE SCHEME OF STATE EDUCATION.

Editor Southern Planter:

The material progress of a nation in the arts of civilization depends primarily on the training provided for its citizens through the medium of its public schools. While every phase of educational activity is confronted by problems of serious proportion, the question of organizing and conducting the public schools in a creditable and efficient manner in our larger towns and cities has been fairly well solved, especially when we compare them with those found in the rural districts which afford the chief means of training for citizenship of such a large per cent. of our population.

It is currently stated that from 95 to 98 per cent. of our children receive no training beyond that obtained in the public schools. If this is true, the public school at once becomes the most important factor in our educational system, as it affects the lives and future prosperity of the vast majority of our people. The stimulus provided for the mind in childhood, the cultivation of the nobler instincts, the strengthening of life's ambitions are markedly affected by the few years of training accorded to the average child under our present system of education. If this be true, should not every effort be made to improve the condition of the public schools and particularly those in the rural districts where the natural isolation of the people makes the subject of their maintenance on an efficient basis an exceedingly difficult task at best. Directing the mind of the child along right lines in the incipient stages of its development is the most important service that can be rendered to the State and nation, for it will exert a powerful influence on the entire future of

those who are ultimately to govern the country and direct the affairs of State.

The rural school problem of to-day is therefore one of national importance, for it is clearly recognized that the great mass of children who attend these schools, and must of necessity constitute our future tillers of the soil, do not now receive that definiteness of training for their life work which is imperative and yearly becoming more so because our rich natural heritage of soil has been ruthlessly wasted through ignorance and improvident cultivation. Since agriculture is to constitute the life work of many of the boys and girls attending the rural public schools, does it not seem rational that some effort should be made to teach therein the fundamental principles of this important subject? If the majority of the boys and girls in a city school are to find their life employment in industrial lines, it is important that they be trained accordingly. As a matter of fact, much work of an industrial character has been introduced into the curricula of our city schools with marked success. Why, then, should not similar training be inaugurated along agricultural lines in the rural schools? Many of our legislators have passed laws making the teaching of agriculture mandatory, and yet little, if any, progress has been made in this direction.

It seems no longer necessary to justify the advantage, even the necessity, for teaching the principles of agriculture to the boys and girls who are to be the future tillers and owners of our vast landed areas. Admit at least for argument's sake that it is necessary. Then, how can a result so desirable be brought about, and is its accomplishment a feasible undertaking? Truly, it is a stupendous task, but that it can be accomplished through earnest and consistent effort is an assured fact, though it will take years of patient labor and effort to bring about the desired changes. The feasibility of the undertaking is evidenced by the excellent work which has been accomplished in the schools of many foreign countries, particularly those of Belgium. But before substantial progress is made, it will be necessary to change the viewpoint of many of our educators with reference to the proper organization of a rural school system. At the present time, we must admit that the plan of organization is hopelessly out of date. The type of education prescribed in the rural school at the present time is based on an attempt to develop the student for collegiate and university training. This is all right from one point of view, but the very small percentage who can avail themselves of the opportunities which higher education affords does not justify withholding a type of useful training which can be made cultural in its character, truly educational in its scope, and of daily use in solving the practical problems of life for the majority of our boys and girls whose education will be completed upon graduation from the rural public school.

The question of to-day in many localities is how to keep the boys and girls on the farm. That can be solved by changing the character of training offered in the public schools which at present tends to create ambitions in many a little breast without providing the possibilities for their successful achievement, and is it any wonder under these conditions that blasted hopes should breed discon-

tent? If the boy and girl are led by training and by association to believe that there is no future in agricultural work and no happiness in rural life, is it any wonder that they should seek to escape from the farm and its so-called drudgery? And such, in fact, is what we find to be the case. Upon the other hand, if the boy and girl are taught to utilize the forces of nature properly through a knowledge of the basic principles of agriculture, to understand that they may become the dominant factors in the fields about them, that there is an opportunity to subdue nature and make her more serviceable and remunerative to man, will not rural life possess manifest attractions and their affections become fixed upon the farm rather than led away from it? The thoughtful educator must realize the truth of these contentions and the desirability of bringing about a change in conditions which will enable the consummation of an end so very desirable. How shall it be brought about? This is the question being asked over and over again.

First of all, to teach agriculture in the school successfully there must be a trained body of experts available for the work. The dearth of teachers at the present time is one of the most serious difficulties to contend with. Second, it is manifestly impossible to teach agriculture successfully in a rural school where only one teacher is available. There is too much elementary work to be done in giving the necessary instruction in the three r's which have held sway for so long, and which we all admit to be necessary. In most rural communities it would not be possible to have a school with two or three teachers, as very frequently sufficient money is not now available to maintain one. How can this very great difficulty be overcome? Simply by the consolidation of the rural schools—that is, throwing three or four of those in existence to-day into one, maintaining vans at public expense for hauling the children to a given center, and so organizing the school that a skillful teacher of agriculture can be engaged and sufficiently large salaries paid to all the teachers to insure the employment of men and women of a superior type. There are some who may look upon this as an extravagant proposition, yet there is no crop in all the world so precious to a nation as its boys and girls. There is no crop fraught with such marvellous possibilities. There is no crop on which the parents are more ready to lavish every care and attention. Is it possible that these same parents will consider for one moment the question of expending a few paltry dollars when the future development of the minds and the outlook on life of their children is at stake? Some will say that this is all too true and pictures the situation as it exists, but others will possibly take the view that the matter has not been brought home to the attention of the parents in its proper light. No reform can be accomplished without agitation, and the consolidated school will not come easily, but that it has made substantial and marked progress in many sections, and that the movement is destined to spread throughout the length and breadth of this great country is now an assured fact, and those who hold dear our national supremacy should thank God that an end so desirable is certain of achievement.

It is not necessary in this paper to go into the details of how consolidation can be brought about, but simply to

point out that consolidation is a means to an end in making the work of the district agricultural school a definite and effective part of the scheme of state education. The consolidated school may also undertake a certain amount of high school work and thus the boy and girl in the rural district may find special educational advantages within their reach which they could not enjoy in the past, and they will thus obtain a broader training for citizenship than they could ever hope to secure in the isolated rural school. The school will then become more and more a center of the community life and school gardens and the necessary laboratories for inaugurating agricultural training of the right character can be equipped and maintained. The consolidated rural school will therefore make it possible to bring within the reach of the boys and girls in the rural districts the needed training in agriculture and the natural life and forces which surround them.

But this has not solved the question of supplying the needed teachers of agriculture. It may be said that they can be secured directly from the State College of Agriculture. There will be no objection to this plan, but it is doubtful if anything like an adequate number for a State could be obtained since the value of training in these institutions has only recently been recognized. Moreover, the demand for the graduates up to this time has enabled them to choose the character of the vocational work they preferred to follow at a rate of remuneration greatly in excess of that ordinarily received by teachers. It is quite apparent that there will be a certain percentage of the boys and girls who attend these consolidated schools who will desire to pursue their studies along agricultural and domestic science lines still further, though many of them may hardly be prepared to enter the State College of Agriculture. If they are, and prefer to do so, all good and well. They will be gladly welcomed, for the need of capable and proficient teachers is everywhere apparent. But if there be those who expect to continue in the vocation of farming, would not a practical and less expensive type of education than that provided in the State College of Agriculture be an advantage to, any of them? Would it not be criminal to so arrange the work of our schools as to prevent the ambitious, industrious boys and girls from obtaining the best possible training for their life work. We think the right type of agricultural school would place within the reach of thousands the means of obtaining an elementary agricultural education and who by reason of insufficient funds cannot attend the agricultural college. Therefore, do not limit the opportunity of any. Rather urge and stimulate all who can obtain the highest vocational training possible, for agriculture is after all a study of nature, the mother of mysteries, and the farmer of the future to be successful must have the broadest possible professional training.

Admitting that this is a desirable end, through what means shall the training of teachers and of the boys and girls in question be undertaken since it is not feasible and probably not at all desirable to send them to the State college at this stage of their development. It has been suggested that agricultural high schools be established in the various sections of the State to meet the needs just presented. Some have even gone so far as to advocate the desirability of establishing an agricultural

high school in every county. This would certainly be over doing the matter at the present time, though eventually they will be required. Moreover, it would cost too much to maintain a school in every county. An agricultural school located in every Congressional District will meet the requirements of the situation very nicely. This school if centrally located will not be far removed from any of its patrons. It will be easily reached by the boys and girls, and being located near a good town will give them excellent educational advantages and still keep the cost of living down to a minimum.

A district agricultural school of the best type in which training in agriculture and all its elementary branches and domestic science can be undertaken, can certainly be organized and placed under a competent corps of teachers and maintained at an annual cost of not more than \$10,000. Presuming that a State has eleven Congressional Districts, the cost of maintaining these schools would not be over \$110,000 a year. Does this sum seem large? Think for one moment of the State's chief source of taxable wealth. Does it not consist of land, farm buildings and equipment, and live stock? Then is a little of the taxes which constitute the State's principal source of revenue too much to invest in the professional training of the farmers' boys and girls. If the local communities are given an opportunity to contribute the funds for the necessary buildings and equipment in order to secure the location of the school, and it will be found feasible to have them to do so, each one of them will be able to care for from 100 to 500 boys and girls. On the lowest estimate there would be 1,100 students pursuing this special type of training which will fit them eminently for their life work either as farmers or teachers. On the higher estimate there would be 5,500 boys and girls studying in these schools, and it will not be long until this number of young men and women will be found in schools of similar character in some of our States. When this end is accomplished there will be a body of teachers going out each year eminently well qualified for the work of instruction in the consolidated rural schools, and so the transition of the rural school from an inefficient educational organization to one highly proficient and especially designed to serve the needs of the community for which it exists can be brought about.

That the plan of establishing district agricultural schools is feasible has already been demonstrated, some of the Western States, notably Minnesota, Wisconsin and Nebraska having each several schools of this type, while Georgia has recently established one in each of the eleven Congressional Districts of the State. The course of training offered in the Western institutions while eminently practical has been sufficiently broad from a scientific and cultural standpoint to give the boys and girls attending a fairly liberal education and a clear grasp of the great possibilities of country life which follows the utilization of the truths of science in a natural manner. These schools have been the means of stimulating a renewed interest in the avocation of farming, and contrary to expectation, a majority of the boys and girls who have graduated from them have returned to their farms because they obtained the right perspective of agriculture in their school days, and were not led to believe that the only type of

education worthy of their attention was one that would lead them into professional fields and away from the farm.

There is no State which cannot afford to invest as much money as has been suggested for the development of a type of schools that will enable them to readjust their rural school system so as to meet the requirements of the present day and generation and educate teachers properly trained to man them. The question of the cost of education which is so frequently raised by the would-be watch dog of the treasury is generally an evidence of ignorance rather than of patriotism. The liberal expenditure of funds for educational purposes should never be called in question. How the funds are expended and the efficiency and value of the training given to the boys and girls through the expenditure of the funds is the real question which should be watched by the people and their representatives as well. It is quite evident to all clear thinking men that the district agricultural schools adequately maintained and directed along the right channels will earn a yearly increment far surpassing their cost.

The best organization for the District Agricultural School is still largely a matter of opinion, but it is needless to say that it should not be complicated under any circumstances, and that the course of study should be simple, elementary and practical; that the laboratory and the application of knowledge should be made one of the primary and essential features of the school; that the dignity of labor be emphasized day in and day out; while the necessity of work with the hands should be a motto constantly kept before the minds of the children. If the vitality and world leadership of which our nation so proudly boasts is to be maintained, the dignity of honest labor of every type must be stressed by all our leaders of thought and education, and there is no place where it can be emphasized with more marked results than in schools of the type under discussion. The school should of course have the necessary instructors in English and experts in charge of the departments of agriculture, dairying, horticulture and domestic science. It should be well equipped with buildings, laboratories and apparatus in order that the training may be made most efficient. This is a point of the utmost importance and is vital to the success of the work.

As to administration the less complicated it is the better. In some States they have deemed it wise to make these schools branches of the State College of Agriculture or the State University, as the case may be, and with a board of directors consisting, say of the governor of the State, the Superintendent of Public Instruction, and the President or Dean of the State College of Agriculture. We heartily commend this plan for simplicity, economy and efficiency. In other States a larger board has been deemed advisable, while in some others there is a separate board for each school. Complicating the work of administration, however, is very undesirable and should be avoided in so far as possible.

As to the course of study, it should be three-fold in nature; first, to stimulate and train the mind; second, to instruct through laboratory processes; and third, to make the work of practical value to the students through actual

demonstrations in the barns or in the field. Three hours a day might appropriately be devoted to work in English, mathematics and history; three hours to work in agriculture and the related sciences, and three hours to actual work on the farm. The farm work should be made as educational in nature under the direction of a competent teacher as possible, while the equipment of tools, implements and animals with which the boy is brought in contact should be of the best. Remember that you are creating life ideals. Have them of the best. A nation can afford no other type. The girls on the other hand, will be studying the problems of domestic science, laundering, and the hundred and one things incident to a perfect knowledge of good housekeeping and household sanitation.

Space will not permit the incorporation of the laws governing the establishment of the various kinds of agricultural schools or setting forth in detail the object and purpose of their organization. Those interested in this matter, however, will do well to secure a copy of bulletin Vol. VII, No. 11 of the University of Georgia, which gives the plan of organization, the course of study and the law in detail by which the district agricultural schools of that State were established, and for the equipment of which the various districts and counties and towns in which they are located contributed between \$800,000 and \$1,000,000. What else is needed to demonstrate the esteem in which this type of education is held by our people. The maintenance of these schools is made possible through the setting aside of the tax on fertilizers and oils, and it is stipulated that there shall be four to six teachers in each school, agriculture and its allied branches to be made the major subject for the boys and domestic science the major subject for the girls. After much study and consideration a tentative course of instruction was adopted for these schools, and while they will only commence actual work in January, there is no reason to believe that the course adopted is not an excellent one in most respects. It is true that it will undoubtedly have to be modified to meet local conditions and influences of soil and climate. Particularly is this true of the organization of instruction in agriculture, but as a general course of instruction for use in schools of this character, the writer has no hesitation in recommending it as one well worthy of careful consideration on the part of all who are interested in the establishment of schools of this character.

There can be no question as to the value of the type of education contemplated for in these schools. It simply remains through an efficient organization and administration of them to show by actual demonstration the value of this character of instruction and to illustrate by this means the very clear-cut and definite relationship of the district agricultural school to the scheme of State education. Unquestionably there will be difficulties to overcome, but those in charge of the work confidently believe that this will be successfully accomplished, and that in the end each one of these schools will become an effective means of developing and promoting the best interests of the boys and girls who desire to till the soil in the respective districts of the State in which they may reside. These schools will not only train the boys and girls for their life work on the farm or as teachers, but will become

(Continued on page 136.)

THE Southern Planter

PUBLISHED BY
THE SOUTHERN PLANTER PUBLISHING CO.,
RICHMOND, VA.
ISSUED ON 1ST OF EACH MONTH.

J. F. JACKSON,
Editor.

B. MORGAN SHEPHERD,
Business Manager.

W. W. RHOADS,
Western Representative, 844 Tribune
Building, Chicago, Ill.

MANCHESTER OFFICE:
W. J. Carter, 1102 Hull Street.

ADVERTISING RATES
will be furnished on application.

The SOUTHERN PLANTER is mailed to subscribers in the United States, Mexico and island possessions at 50 cents per annum; all foreign countries, \$1.00; the city of Richmond and Canada, 75 cents.

REMITTANCES should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.

SUBSCRIBERS failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.

WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. Rejected matter will be returned on receipt of postage.

No anonymous communications or enquiries will receive attention.

Address THE SOUTHERN PLANTER,
RICHMOND, VA.

ENTERED AT THE POST-OFFICE
AT RICHMOND, VA., AS SECOND-
CLASS MAIL MATTER.

INSURE YOUR HEALTH AND COMFORT

on stormy days
by wearing a



SLICKER

Clean - Light
Durable

Guaranteed
Waterproof

\$300 Everywhere

A. J. TOWER CO. BOSTON, U.S.A.
TOWER CANADIAN CO. LIMITED, TORONTO, CAN.

TO ADVERTISERS.

Please bear in mind that we must have all copy or instructions for advertisements by the 25th of each month without fail. Every month we are compelled to omit advertising in large volumes for the simple reason that copy does not reach us in time.

A NEAT BINDER.

If you will send 30 cents to our business office, we will send you a neat binder made of substantial Bristol Board, in which you can preserve an entire volume of the Southern Planter. Many of our readers find these a useful device, as they always save their copies for reference.

WITH THE ADVERTISERS.

The Palmetto Farms are offering some choice stock this month.

E. D. Crouch advertises his prize-winning Rose and Single Comb Black Minorcas.

The Armour Fertilizer Works have an announcement regarding their animal matter fertilizers on another page.

S. T. Beveridge & Co. are offering seasonable seeds this month.

Riverside Park offers choice Yorkshire Swine and Poultry.

DeWitt Poultry Farm is advertising sixty varieties of poultry.

Fred Shoosmith is making a special drive on the new "Ward" Blackberry.

The Southern Stock Yards have a half-page announcement, to which attention is invited.

Overton Hall Farm has a prominent advertisement regarding its forthcoming Berkshire Sale on another page.

The Richmond Abbatoir is advertising Bone Phosphate in addition to "Rarva" meat meal.

Nitrate of Soda can be had through the Nitrates Agency Company.

The Elkhart Carriage & Harness Mfg. Co. start the season's advertising with this issue.

Harrison's Nursery have a couple of advertisements in this issue, to which attention is invited.

Farmers interested in good paints will do well to refer to the advertisement of the National Lead Co.

Frnit and truck packages are advertised by the New Albany Box & Basket Company.

Split Hickory Vehicles are being advertised as usual this season by the Ohio Carriage Mfg. Co.

The Belcher & Taylor A. T. Co. is advertising its Corn Planter and Fertilizer Sower this month.

Wood's Grass and Clover Seeds.

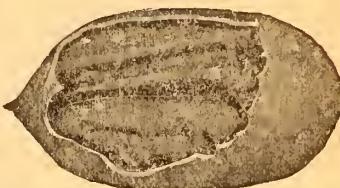
Best Qualities Obtainable and
of Tested Germination.

We carry one of the largest and best stocks in this country. Specialties that we offer to advantage, are

Alfalfa, Japan Clover,
Tall Meadow Oat Grass,
Paspalum Dilatatum,
Johnson Grass,
Bermuda Grass, etc.

Our Catalogue gives fuller descriptions and information about Grasses, Clovers and Farm Seeds than any other seed catalogue published. Mailed free on request. Write for it, and prices of any seeds required.

T. W. WOOD & SONS,
SEEDSMEN, - Richmond, Va.



New plan for Early-Bearing Pecan Grove and other fruits, by mentioning Southern Planter. Fifty per cent. reduction in price of trees. Sure to live. No agents. FREIGHT PAID.

B. W. STONE & CO., Thomasville, Ga.

ROYAL 2-HORSE DISC PLOWS



Disc Plows." Tells about Disc Plows of all kinds and descriptions.

Chattanooga Implement & Manf'g Co.,

Dept. M CHATTANOOGA, TENN.

Were new and
different, but
they made good.
All seeing them
want them.
Write for free
booklet, "Disc
Plows and Royal

BOSTROM'S IMPROVED FARM LEVEL, WITH TELESCOPE

Pat'd 1902.

Is no MAKESHIFT, but the best one made for Terracing, Irrigation and Drainage. Price \$12.50, including Tripod and Rod, delivered to you. Write for descriptive circulars. Treatise on Terracing, etc. Free.

Bostrom, Brady Mfg. Co.,
8 Madison Ave., Atlanta, Ga.



BANK OF RICHMOND,

Main and Ninth Streets.

CAPITAL AND PROFITS EARNED,

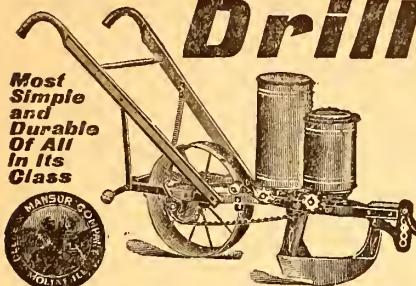
Special attention paid to out-of-town accounts. Correspondence invited.

Three per cent. interest allowed in Savings Department.

Compounded Semi-Annually.

\$1,200,000.

Fertilize and Plant With a New Deere Drill



For One Horse

This is the most practical—simple and "Deere Durable" one-horse Corn Drill made. Investigate before buying any planter by writing a postal for our new 1908 Free Book, "Corn—More and Better," which illustrates and describes this implement. Comes with or without Fertilizer Attachment shown above. Can also be furnished with pea attachment, planting peas and corn at one operation. Feed is positive, distributing fertilizer in almost uniform, without waste, up to 450 pounds per acre. Seed drop is the famous Deere Edge Selection, known to be absolutely accurate.

Write a Postal to Deere and
Get Your Name On Our

FREE Mailing List

The day we get your name and address on postal or by letter we send you our latest Free Books and keep sending you valuable information free about values and farm machinery improvements, if you write us. Keep posted by writing us. Find out now all about this New Deere Drill by sending for our

FREE BOOK

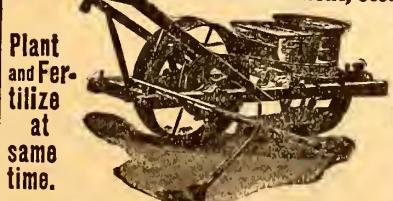
"CORN—More and Better." To know point for point how to compare all farm machinery and get best value, ask for our Free Corn book and New Deere Drill book No. 41.

Deere & Mansur Co.,
Moline, Ill.

Deere

PLANT CORN

Peas, Beans, Beets,
Buckwheat, etc.



"KING CORN FIELD"

marks out rows and plants in drills or hills 4 1/2, 9, 12, 18, 24, 36 or 72 inches apart. Corn and any other seed at same time. Distributes all commercial fertilizers, wet, dry, lumpy, etc., 25 to 700 lbs. per acre. A great labor and time saver. Built to last. Full guarantee. Agents wanted. Send for Catalog.

Belcher & Taylor A. T. Co.,
Box 25, Chicopee Falls, Mass.

Attention is invited to the full-page advertisement of the Sharples Separator Co.

Edison Phonographs are advertised by F. K. Babson.

Attention is invited to the advertisement of the Columbus Carriage Co., to be found on another page.

The Johnston Harvester Co. has a prominent announcement this month, to which attention is invited.

The "Want" columns offer numerous bargains this month. Better look over them.

BINDERS.

We are expecting a new lot of Binders shortly, when all orders can be promptly filled.

\$3.50 PAIL ABSOLUTELY FREE.

In this issue you will find full particulars of a very remarkable offer. In order to prove the worth of their guaranteed stock tonic, The Wilbur Stock Food Company, of Milwaukee, Wisconsin, where they have no agent, actually agree to give a 25-pound pail of Wilbur's Stock Tonic free of charge to every reader of this paper. All they ask is that you write and tell them what live stock you own and what conditioner you have used.

Wilbur's Stock Tonic is known and used all over the world and has given intelligent stock raisers universal satisfaction. The Company make no secret of the ingredients of their tonic and show their good faith by fully complying with the pure food laws. Their farm remedies are labelled and sold under a positive guarantee of satisfaction, or money cheerfully refunded.

You should take immediate advantage of this remarkable offer, and be sure and mention this paper when you write to the Wilbur Company. Their address is Wilbur Stock Food Company, 371 Huron St., Milwaukee, Wisconsin.

A PRIZE WINNER.

D. E. Morlock, Morriston, Ontario, writes November 14, 1907: "I think Absorbine the best remedy I have ever used. Have a fine yearling carriage colt that got a Bog Spavin a few days before Guelph Show. I used Absorbine as directed from four to six times a day, rubbing it in well, and inside of a week you could not tell which leg was hurt. She carried the red ribbon at Guelph and at four other shows after the cure."

Absorbine penetrates to the seat of trouble promptly and effectually, without blistering or removing the hair. Does not require the horse to be laid up. Mild in its action, but positive in its results. It will give you satisfaction. \$2.00 a bottle at druggists. Manufacture by W. F. Young, P. D. F., 109 Monmouth St., Springfield, Massachusetts.

ONE MAN DOES WORK OF TWO

With Iron Age Riding Cultivators, You can do it easier and better, because they are built on lines that make this possible. Hoes are under perfect control. Can regulate depth and keep hoes desired distance from growing plants. More advantages in our Iron Age

SAVE
HIRED
HELP

No. 82 Pivot
Wheel. A new
Model "Iron Age"
Rider.

BATEMAN MFG. CO., Box 167C, Glenloch, N.J.

HERCULES Stump Puller



Clears an acre of heavy timber land each day. Clears all stumps in a circle of 150 feet without moving or changing machine. Strongest, most rapid working and best made.

HERCULES MFG. CO.,
413 17th St., Centreville, Iowa.

THE IMPROVED SCREW STUMP PULLER

Write for Prices.



Chamberlin Mfg. Co., Olean, N. Y.

STUMP PULLER.

Warranted the most practical machine made. One man can lift 20 tons. Made in 3, styles, 10 sizes. Screw, Cable and Hand Power. We manufacture a Tile Ditcher and best CORN HARVESTER ever made. Cuts two rows with one horse. Agents wanted. Write for catalogue.

H. L. Bennett & Co., Box 14, Westerville, Ohio.

Monarch

Hydraulic Cider Press

Great strength and capacity; all sizes; also gasoline engines, steam engines, saw mills, threshers. Catalog free.

Monarch Machinery Co., Room 170, 39 Cortland St., New York.

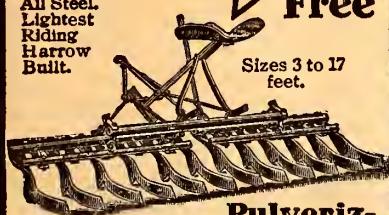
Bigger Crops

Save Time—Save Yourself— and Horses Work—Save Repairs, Trouble, Money. These are the things you can do, as thousands of other farmers are doing, by using the guaranteed

"Acme" Try It Free

All Steel. Lightest Riding Harrow Built.

Sizes 3 to 17 feet.



Pulverizing Harrow, Clod Crusher and Leveler

TRY IT FREE

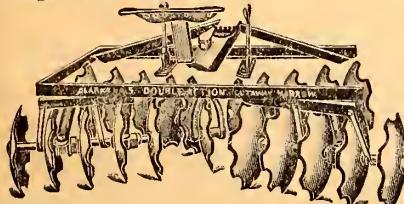
We want you to see what a fine, smooth seed bed it prepares, in all soils, under all conditions; How the knives cut through to the undersoil, chopping the buried sod or trash but never dragging it to the surface.

Our Free Book

contains valuable articles by high authorities on the preparation of seed beds. Also tells all about the "Acme." Send postal for it today.

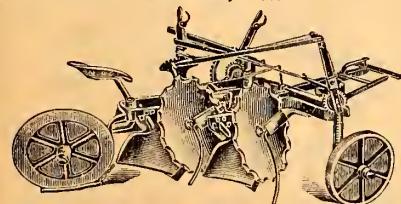
Duane H. Nash, Inc.,
Box 19, Millington, N. J.

DISC HARROWS AND DISC PLOWS. Clark's Double-Action Cutaway Harrow—the greatest labor saver. Incomparable work.



Does in one trip what ordinary disc harrows cannot do in three and four trips.

Combination Disc and Mold-Board Plow. Turns the sod all the way over and buries the weeds, etc.



Leaves the land easy to harrow and level; not set on edge and in bumps like other disc plows.

These are the tools of to-day.

CUTAWAY HARROW CO., 45 Main St., Higganum, Conn.

ASHTON STARKE, Southern Sales Agent, Richmond, Va.

Wheels, Freight Paid \$8 75
for 4 Buggy Wheels, Steel Tires on. With Rubber Tires, \$15.20. Tires, wheels 3/4 to 4 in. tread. Rubber Tire Top Buggies, \$41. Harness, \$5. Write for catalog. Learn how to buy *etc.* Repair Wheels, \$5.50. Wagon Umbrella FREE. W. V. Boob, Cincinnati.

SELECTING SEED OF KING'S IMPROVED COTTON.

I will say that it is not an easy job, aside from the expense and trouble, when one undertakes to keep his seed up to one standard variety and especially unless he has a thorough knowledge of all the characteristics of that variety.

For instance, we take the King's Improved, which can be easily identified by the red spots in the bloom, this is not always positive proof, for occasionally you see a perfect stalk in every other respect with a white bloom. Some planters are of the opinion that this white bloom cotton has become mixed with King's Improved Cotton by growing other varieties on the same plantation, or by ginning, care not being taken to clean out the roll of seed.

This is evidently true in good many cases, and for this reason, in improving this cotton I always give preference to stalks with red spots in the bloom. But, nevertheless, King's Improved cotton originated by a cross between Sugar Loaf Cotton, which has a red spot in the bloom, and some other cotton of a larger boll variety by continually growing the two varieties together have become so identified that it would require an expert to distinguish one from the other but for the red spots.

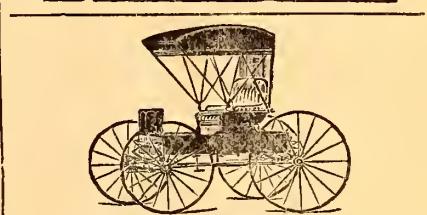
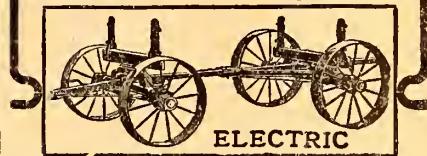
But there are many other varieties too numerous to mention which can be easily detected by the form of the plant, the leaves, the bloom, the boll, the lint, and the seed. A variety of cotton is known by one who is accustomed to it, as an apple of a certain variety is known from another. So, in the beginning, get the best variety of seed desired, plant and cultivate as any other cotton. Just take it for granted now that we want to improve King's Cotton. When the cotton is in full bloom, and all through the blooming season until maturity, only one man should be intrusted to this work of selecting the largest and most prolific stalks in his field, giving preference to those stalks which bear the most resemblance to the variety desired in the bloom, the boll and the form of the plant. Each of these stalks must be designated by tying a tag to the top where it can be readily seen in picking. All of the untagged cotton should be picked first, as you would be liable to pick some of the untagged cotton if you should pick the tagged first. It will require 3,000 tags and stalks, forty bolls to the stalk, to make a bale of cotton, or twenty-five bushels of seed. By counting a few average stalks you can make an estimate of how many tags it will take to get the required amount of seed for planting. For making the tags, pasteboard boxes of every description can be used, which merchants will be glad to furnish you in cleaning up stock for fall trade. Cut

YOU **Can Save a Lot of Work**
Can Save a Lot of Money
Can Increase Your Comforts
Can Increase Your Profits

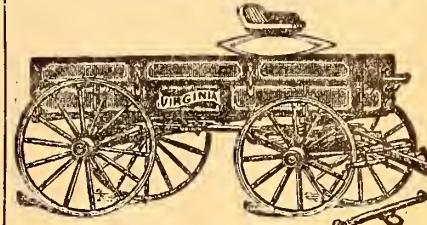
If you are interested in those things we'd like to send you our new book about **ELECTRIC STEEL Wheels** and the **ELECTRIC Handy Wagon**

More than a million and a quarter of them are in use and several hundred thousand farmers say that they are the best investment they ever made. They'll save you more money, more work, give better service and greater satisfaction than any other metal wheel made—because **They're Made Better.** By every test they are the best. Spokes united to the hub. If they work loose, your money back. Don't buy wheels nor wagon until you read our book. It may save you many dollars and it's free.

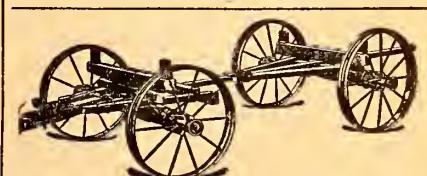
ELECTRIC WHEEL CO.,
Box 146, Quincy, Ills.



BUGGIES AND WAGONS.
Just as good as skilled Virginia mechanics can make out of Virginia grown material. You know that this must be the best. Send for catalogue.



RICHMOND BUGGY & WAGON CO.
Richmond, Va.



Havana Low Wagons

All steel, made to last; wood gears also. Save high lifting, hard pulling, avoid cutting up fields. Tires any width up to 6 inches. STEEL WHEELS furnished TO FIT OLD GEARS. Write for free booklet.

HAVANA METAL WHEEL CO., Box 46, HAVANA, ILL.



With a FOLDING SAWING MACHINE, 9 CORDS by ONE MAN in 10 hours. Send for Free Illus. catalogue showing latest improvements and testimonials from thousands. First order secures agency. Folding Sawing Mach. Co., 158 E. Harrison St., Chicago, Ill.

SAW YOUR WOOD
SAWS EAST
No Backache
weights only 41 lbs.





LOW AND EASY TO LOAD.

Broad tires, no rutting. Quick changes from drilling to broadcasting, also for thick and thin spreading. Furnished with shafts or tongue. Write for descriptive circulars and testimonials.

Special Large Size, Sows 8 Feet 3 Inches Wide.
Belcher & Taylor A. T. Co.,
Box 25, Chicopee Falls, Mass.



We Manufacture the Davis
OUR FREE CATALOGUE

Tells How You Can Easily
Save \$20 to \$50

on the first cost of a standard high-grade cream separator by straight factory buying. Tells why and how you may make your cows pay you \$10 to \$15 more per cow per year while cutting your dairy work in two. Fully describes the latest improved 1907 model

DAVIS CREAM SEPARATOR
the easiest running, easiest cleaned, most durable standard separator made and tells why it is. Contains valuable separator information that has cost us thousands of dollars, yet it's free to you—if you write today and mention catalogue 126. Write now. This offer may not appear again.

Davis Cream Separator Company,
568 North Clinton Street, Chicago, Illinois.
Cut this out, sign and mail at once.

FOR ALL MIXED FEEDS



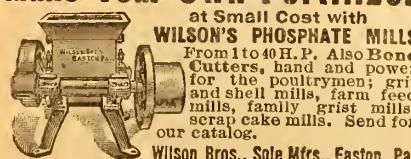
Free Catalogue

KELLY DUPLEX
Crushing Mills

New double cutters, force feed, never choke. Use 25 percent less power than any others. Especially adapted for gasoline engines. Four sizes

THE O. S. KELLY CO., 140 N. Lime St., Springfield, Ohio.

Make Your Own Fertilizer



Wilson Bros., Sole Mfrs., Easton, Pa.

Always mention The Southern Planter when writing advertisers.

them into small bits one by two and one-half inches, punch hole in one end and tie a cotton twine string into this about six inches long, and leaving the ends about even three inches long to tie it to the stalk. When the cotton is open enough, pluck the untagged cotton first, and then the tagged, and keep separate, and gin separate. See that the roll of the gin is cleaned out, and all the flues and stalls into which the seeds pass. If you have no separate stalls, then you must catch the seed as ginned, for otherwise, in a short while, the fruits of your labors would be spoiled.

I have given you the best plan for improving cotton, I think, as it is the one adopted after having tried many ways. And it stands to reason, just as in breeding stock to eliminate bad blood, the strongest and healthiest are selected for good breeders, so it is with cotton. See ad. in this issue.

I. W. MITCHELL,
Prop., Sugar Loaf Cotton Farm.

There are so many roofings on the market to-day that the average person is confused by the claims made for each. For this reason the little booklet, "A Few Thinks on a Subject Worthy of Serious Thought," written by Mr. H. R. Wardell, is particularly interesting. In it he tells in a most convincing manner the superiority of Asphalt Roofing in general and Genesco in particular, which is made from asphalt taken from the famous Trinidad Lake in South America. This booklet is sent free by the Barber Asphalt Paving Company, Philadelphia, Pa., to any one writing for it and mentioning this paper.

We advise our readers to write for it.

Among the manufacturers of veterinary remedies, the firm of Fleming Brothers, claims distinction for having produced successful remedies for several of the most common diseases known to the live stock industry. Especially is this true with reference to lump jaw, fistula, and poll evil, these diseases having for a long time been regarded as practically incurable after reaching a well developed stage. Their remedies are easily used, even by inexperienced persons, and their guarantee holds good, no matter how advanced the case may be. Their remedies for bone spavin, ringbone, and other blemishes are also sold under the broadest guarantee. Fleming's Vest Pocket Veterinary Adviser is offered free to persons interested in the ailments mentioned above. It contains 192 pages and is a book worth writing for. Address Fleming Bros., No. 280 Union Stock Yards, Chicago, Ill.

A neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

MODERN SILAGE METHODS

Revised and Enlarged Edition—224 pp.—library size—copyrighted 1908—over 40 illustrations. Modern Silage Methods is reliable—used as a standard Text Book by many State Agricultural Colleges. Contents by chapters follow:

1. Advantages of Silo, 25 pages.
2. Silos: How to Build, 76 pages.
3. Concrete and Cement Silos, 10 pp.
4. Silage Crops, 16 pages.
5. How to Make Silage, 19 pages.
6. How to Feed Silage, 22 pages.
7. Feeders' Guide, Etc., 56 pages.

A vast amount of knowledge in plain practical language. Nothing ever published so complete—answers every question you can think of on Silos and Silage. Mailed for 10 Cents, Coin or Stamps. Please mention this paper.

**SILVER MFG. CO.,
SALEM, OHIO**

ECONOMY SILO

Medal and Highest Award at the Jamestown Exposition.

Ensilage is the cheapest and most nourishing stock food; the Economy Silo keeps it in perfect condition.

Air-tight all over. Continuous doorways make ensilage always easy to get at. Easy to erect and fully guaranteed.

Write to-day for free illustrated catalogue with experience of users.

ECONOMY SILO AND TANK CO.,
Box 38-G, Frederick, Md.



BATEMAN MFG. CO., Box 1677P, Grenloch, N. J.

DEHORNING ISN'T CRUEL

It may be with a saw, but not so when the **KEYSTONE DEHORNER** is used. It cuts from four sides at once; makes a sliding, sharp shear cut. Any stock-raiser can do it easily. No crushing or splintering of horns or tearing of flesh. Done in 2 minutes. Send for free booklet. M. T. Phillips, Box 45, Pomeroy, Pa.



Please mention The Southern Planter.

Genasco Ready Roofing

The only roofing water-proofed entirely with natural asphalt—Trinidad Lake Asphalt—the greatest weather-resister known.

Smooth or mineral surface. Several weights. Ask any wide-awake dealer. Refuse imitations and substitutes. Write for Book 62 and samples.

THE BARBER ASPHALT PAVING COMPANY

Largest producers of asphalt, and largest manufacturers of ready roofing in the world.

PHILADELPHIA

New York San Francisco Chicago

ARMY AUCTION BARGAINS

Tents	\$1.90 up	Old Pistols	\$.50 up
Rifles	1.95 "	Officers' Swords	new \$1.75 "
ARMY SADDLES	3.00 "	Cavalry Sabres	1.50 "
" Bridles	1.00 "	UNIFORMS	1.25 "
" Leggins, pr.	.15 "	? Shot Carbines	3.50 "

1907 MILITARY ENCYCLOPEDIC CATALOGUE, 260 large pages, containing thousands of beautiful illustrations—with wholesale and retail prices of 15 acres GOVT. AUCTION SALE GOODS, mailed for 15 cents (stamps).

FRANCIS BANNERMAN, 501 Broadway, NEW YORK

CALL ON

Fuller Brothers

DANVILLE, VA.,

For Fencings, Roofings, Paints, or anything in the way of

HARDWARE.

They Will Treat You Right.

VETERINARY COURSE AT HOME.
\$1200 a year and upwards can be made taking our Veterinary Course at home during spare time, taught in simplest English. Diploma granted, positions obtained for successful students, cost within reach of all, satisfaction guaranteed, particulars free. Ontario Veterinary Correspondence School, London, Can.

SUCCESS OF DE LOACH MILL.

Over 15,000 De Loach saw-mills are in use throughout the world. These celebrated mills are so far in the lead that there is practically no competition. For twenty years they have been recognized as the world's standard. With a De Loach mill, a man can saw his own lumber or do custom work at the very minimum expense. The machine is so simple a 15-year-old boy can operate it as successfully as a grown man. Two hands can cut 5,000 feet a day right along. The guaranteed capacity of inch boards in 10 hours is 1,750 feet for the 3 1/2 H. P. mill; 3,500 feet for the 7 H. P. mill, and 7,000 feet for the 14 H. P. mill. As a matter of fact, the capacity of a De Loach mill is 25 to 50 per cent. more than the guarantee calls for.

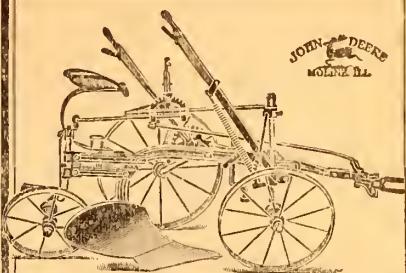
The De Loach has Variable Feed, Friction Set Works, Automatic Steel Triplex Dogs and Diamond Track. The company manufactures saw mills up to 200 H. P., Steam Engines and Boilers, Gasoline Engines, Portable Corn and Feed Mills, Flanterns, Shingle Mills, Wood Saws and Water Wheels. The company pays the freight on mills and other machinery and is noted for prompt shipment. It enjoys an enviable reputation for fair dealing. If you are in the market for a saw-mill, we suggest that you write to the De Loach Mill Mfg. Co., Box 265, Bridgeport, Alabama, for their free illustrated catalogue.

HAVANA LOW WAGONS.

with wide grooved tires on their metal wheels and with steel gears or wood gears, if preferred, save farmers and teamsters unnecessary strain in loading and unloading and at the same time the wide tires preserve the sod of the field and maintain smooth public roads. The farmer who owns good gears may lower his wagon by buying the steel metal wheels only. He should first write for particulars as to how to measure for an order of wheels. Full information and prices given by the Havana Metal Wheel Co., Box 46, Havana, Ill.

Modern Practice in "American" Centrifugal Pump Construction, Bulletin No. 104, is just issued by the American Well Works, Aurora, Ill. It illustrates all the styles of centrifugal pumps made for different purposes for such pumps such as farm irrigation, drainage, brewery pumps, fire pumps and many other similar purposes. This well-known firm also furnishes complete literature in regard to machinery for well drilling, oil, gas, etc. Our readers will do this publication a favor by stating where they read this notice in writing this firm.

Always mention The Southern Planter when writing advertisers



Light Running Stag

Stag plows look like thoroughbreds stripped for a race—strong and trim. They have that smooth, light running quality you cannot describe, but which you feel. When you want a strictly high-grade plow at a medium price, get a frameless



STAG, SULKY OR GANG

For 70 years the "leaping deer" trade mark has been the sign of all that is best in plows. There is hardly a man so old or a boy so young that he has not used John Deere makes.

Booklet Beautiful and Quaint

describes plows, ancient and modern. Illustrated by photos of actual plowing scenes from all over the world.

Ask for booklet 40 Mention this paper.

DEERE & COMPANY, Moline, Ill., U. S. A.

TO GROW A GOOD GARDEN

good cultivation is absolutely necessary, but it can't be done with poor tools. Here's an Iron Age Tool especially made for garden work. It not only does good work, but it is easy to operate. The boys and girls can do the gardening and produce big crops, if you'll equip them with Iron Age Tools. Send for our 1908 catalog.



Bateman Mfg. Co., Box 167G, Grenloch, N. J.

15c. Cures ten Corns, stays cured, too. Best in the world. No harm nor pain. Guaranteed. Instructions with each box. Agents wanted.

IMBODEN COMPANY,
Box 6, Cleona, Pa.

Don't Allow "Pests" to Destroy Your Fruit.

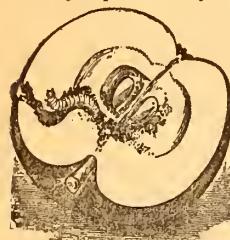
Did you ever stop to think why you gathered so few perfect apples last year? More than likely the failure of your fruit crop was caused by a fungus, or the codling moth, which blighted the blossoms and young fruit as it was forming. They were your enemies last year—they will be this year.

Study up the subject and be prepared to give the pests battle royal this coming year by spraying trees and vines at the proper time.

This matter of spraying is no longer a question of policy or of experiment, but of stern necessity to farmers and fruit growers.

The war against the destructive army of pests must be aggressive—exterminating—if you would save the fruit as well as the trees and vines which bear it.

If you are at all interested in securing a better crop of fruit or vegetables it will be well worth your while to write the William Stahl Sprayer Co., Box 165 U, Quincy, Ill., for a copy of their free book telling all about spraying and how, when, where and what to do it with.



(Continued from page 130.)

centers of information and usefulness in their respective communities. The teachers can do much to stimulate an interest in better methods of farming. The officers will assist in holding farmers' institutes, in disseminating useful information to farmers about new crops, plant and animal diseases, etc., and in promoting the other activities in direct charge of the State College of Agriculture which of necessity exercises the part of a foster mother to the schools and will be active in co-operating with them and promoting their best interests in every possible way. The course of study in these schools is designed to fit the students for taking the advanced training provided in the State college. In other words, the boy who graduates from one of the schools can enter the State college without an examination. In the course of time there will be a sufficient number of these men going to the State college to furnish that higher type of educated leadership which the agricultural interests of the State will demand, and thus the various links in the organization will be rendered complete and perfect—the State College of Agriculture standing at the summit of the State's agricultural educational system; the district agricultural school constituting the necessary connecting link between the college and the consolidated rural and high schools of the State; the course of study in the lowest being so prescribed and developed as to lead up to the highest and the organization of the highest being so arranged as to fit its graduate for the duties incumbent upon them in every field of agricultural activity which the interests of the State may require to be served.

ANDREW M. SOULE.

State College of Agriculture,
Athens, Ga.

STOCK TONIC NECESSARY.

Farmers and cattle raisers are coming more and more to see the great importance of a stock tonic.

Before our present-day experimenters proved their point, no one thought it necessary to do anything to aid animal digestion; in fact, no one thought such a thing could be done.

Now, feeders of live stock, whether for beef or milk, never even attempt to "fit" a bunch of steers or produce a given quantity of milk without giving each animal in the herd a corrective in daily doses.

A few years ago farmers took sickness and loss as part of the business. Their profits were small because a few weeks' heavy feeding on an unbalanced ration, without assisting nature in any way, was sure to throw the animal "off its feed" and actually



**APPLE
PEACH
PEAR
PLUM** and all other fruit trees do their best when properly

SPRAYED

Have you any fruit trees that yield poor, wormy, knarled, blighted and imperfect fruit? Do you spray them? If not you are

LOSING MONEY

All kinds of spray pumps at prices from \$3 up.

Our Spray Pumps are reliable, simple and durable.

Used by the Virginia and North Carolina Agricultural Departments.

SYDNOR PUMP & WELL CO.,

DEPT. B.

RICHMOND, VIRGINIA.

**BEATS THE
Grindstone**

TEN TIMES OVER

No pressure, no drawing temper, if you use the

**Practical
Alundum
Grinder**

with wheel revolving 3,000 times a minute. Far superior to emery or stone. Grinds any tool, knife to sickle. Different sizes. Foot power attachment. Write for circular of particulars. Good agents wanted. Address, ROYAL MFG. CO., 35 E. Walnut St., Lancaster, Pa.

**Defender
Sprayer**

All brass, easiest working, most powerful, automatic mixer, expansion valves, double strainer. Catalogue of Pumps and Treatise on Spraying free. AGENTS WANTED. J. P. Gaylord, Box 24, Catskill, N. Y.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

—BARGAINS IN—
2d Hand Machinery

The Watt Plow Co., Richmond, Va.

1—25 H. P. Geiser Engine and Boiler on skids. In first-class order.
 1—15 H. P. (8x10 cylinder) Pitts Engine and Boiler, mounted on steel wheels.
 1—12 H. P., Class J, Geiser Engine and Boiler on wheels. Almost new.
 1—25 H. P. Geiser Engine, mounted on 30 H. P. Boiler on skids. Almost new.
 1—12 H. P. Russell Engine and Boiler on wheels. In first-class order.
 1—10 H. P. Nagle Engine and Boiler on wheels. In good order.
 1—No. 1 Geiser Saw Mill with Main Drive Belt.
 1—7-inch 4-Sided Moulder.
 1—4-inch 4-Sided Moulder.

—ALSO—

1—48-inch Inserted Tooth Simonds Saw.
 1—46-inch Inserted Tooth Simonds Saw.
 1—52-inch Inserted Tooth Simonds Saw.
 1—54-inch Inserted Tooth Simonds Saw.
 1—42-inch Inserted Tooth Simonds Saw.
 All in First-Class Order.

Write us for further information.

THE WATT PLOW CO.,
 1426 East Main Street, Richmond, Va.

**Black Hawk
GRIST MILL**

A hand mill for country, village and city housekeepers. Fresh corn meal, graham, rye flour, etc. Fast, easy grinder made to last. Weight 17 lbs. **\$3.00. PAID.**

Soon pays for itself. You'll find a dozen uses for it. Grinds corn, wheat, rye, rice, spices, coffee, etc. fine or coarse. Just the thing for cracking grain for poultry. Black Hawk book FREE.

A. H. PATCH.
 Mr. of Hand Mills and Corn Shellers exclusively. Agents Wanted. Clarksville, Tennessee.

WARRINER'S CHAIN-HANGING STANCHION

Gives animals perfect freedom; absolutely no chafing. Thousands have testified to its simplicity, completeness and durability, among them Ex-Governor Hoard, of Wisconsin, and I. B. Calvin, Vice-President State Dairyman's Association, Kewanee, Ind. The latter says: "I think them perfect." The purchaser takes no risk, as the Stanchions are shipped subject to 30 days' trial in your own stable. Send for descriptive pamphlet.

W. B. CRUMB,
 South Street, Forestville, Conn.

undo all that had been gained up to that point.

The amount of money lost to feeders in this way must have been something startling and under our present laws of keen competition would have been simply ruinous.

All this uncertain and haphazard way of doing has given place—thanks to the few who have made a study of these things—to a scientific and certain way of reaching uniform results in the cattle trade. Men know a whole lot more than they did, but it's the Stock Tonic above all else that has given cattle raising the reliability of an established business.

If the reader will think for a moment how much the animal system is like a machine, he will see a good reason for the tonic idea. If you overload a machine—ask it to do double work—more power is needed to run it and the strain on every part is greater. So with the fatting steer or milch cow—heavy feed means great strain on the digestive apparatus, more nerve force to run it and more wear and tear on it.

Here is where the tonic gets in its work. Composed as it is of elements known to be beneficial, it gives just the proportion of added strength needed for each part and so the whole animal is carried over and beyond the danger point and enabled to make steady gain in weight. A stock tonic is certainly the one thing needed by the feeder if he is after the greatest profit in his business.

Our fathers got along without the "food tonic" because they didn't know it. To the farmers and feeders these days the "food tonic" of known value, containing the bitter principles which aid digestion, iron for blood building and cleansing nitrates in proper proportion, is an absolute necessity.

LOWER PRICED SEPARATORS.

There is no question but there has been among dairymen a need for a high grade separator which could be sold at a lower price. Everybody wants a cream separator but many have felt that they could not afford to pay the high prices demanded. It remained for the Davis Cream separator Co., of Chicago, to meet this demand, and to place a separator of the first class on the market at a price which is within reach of even the smallest cow owner.

The high price of separators has been due, not to the expense of manufacturing, but to the costly plan of selling. Here is where the Davis people have found opportunity to make their great cut in price. They have not cheapened the material or reduced the capacity, or an inferior machine; but they have adopted the plan of selling direct from their factory, cutting off all State agents, jobbers' and dealers' commissions and ex-

**HIGH GRADE
DROP-HEAD
LIGHT RUNNING
SEWING
MACHINE** **\$12.85**

Positively the greatest Sewing Machine value ever offered. By our direct selling plan, we save you all dealers' and agents' profits. This

Machine is equal to any usually sold by agents for \$30.00. Is substantially made of best material, and is equipped with the latest improvements. Elegant oak drop-leaf cabinet, 4 drawers and full set of attachments. We give our binding 10-year guarantee with each machine. Order one today, try it 30 days and if not found in every way satisfactory, we will refund your money. We are the largest sewing machine distributors in the South, and make prompt shipment. Send for complete catalogue mailed free on application.

MALSBY, SHIPP & CO.

Dept. 14

Atlanta, Ga.

E. F. KIRWAN & CO.,

33 South Gay, Baltimore, Md.
 OFFER YOU THEIR SERVICES AS

Purchasing Agents

And will secure for you the benefit of lowest prices and best quality for all supplies.

**MACHINERY, FERTILIZERS,
SEEDS, GROCERIES, ETC.**

All enquiries promptly answered.
 Drop us a postal whenever you need anything.

ONE MAN

Can sow more grain with a Cahoon hand broadcast seed sower than 5 men can sow by hand. 5 acres per hour is a fair average for the Cahoon and the seed is distributed evenly, with a great saving of time.

The Cahoon Hand Seed Sower

is a practical machine for any size farm. It increases the farmer's profit both ways, in better crops raised, and time and seed saved. Write for new book "Sowing for Results" and 5th anniversary Souvenir.

Goodell Co., 63 Main St., Boston, Mass.



Well Drills

For Horse, Steam or Gasoline Power



Well Augers

For Horse Power

Address

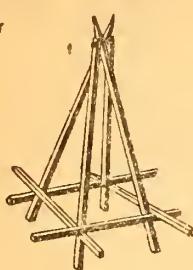
LOOMIS MACHINE CO.

TIFFIN, OHIO

A neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

Bell Hay Curing Rack

READY FOR USE.



FOLDED FOR STORING.

(Patented October 15, 1906.)

Solves the problem of curing pea vine, alfalfa or other hay almost regardless of weather conditions, as the racks give interior ventilation and keep hay from touching ground, thereby causing it to cure out nicely when other methods fail. One handling completes the work and the hay is safe. For prices and circular giving full particulars.

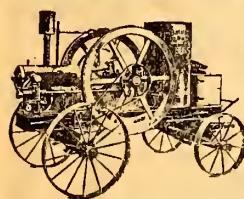
Address H. E. BELL, Burkeville, Va.
AGENTS WANTED IN EVERY COUNTY

MYERS LOCK STITCH AWL
Makes same stitch as sewing machine. Repairs shoes, harness, carpets, awnings, sails, gloves, mittens, saddles, robes, comforts or fur coats. You need one, your neighbor needs one every day.

SEE THAT LOOP
THE AWL FOR ALL

Costs only \$1.00, prepaid. Get one and secure the agency in your locality. Every one buys it. Great opportunity for agents east of Mississippi River. One agent sold 100 in 4 days. Write for booklet E.

C. A. MYERS CO.,
6537 Woodlawn Ave., Chicago, Ill.



MONEY SAVED IS MONEY EARNED

Order direct. We make Engines from 2 to 15 H. P. Stationary and Portable Send for Catalog.

BAUROTH BROS.,
61 Fisher St., Springfield, Ohio.

ENGINES FOR SALE

Two horse traction, \$250; 10 horse portable, \$150; 12 horse portable, \$200; 6 horse boiler and engine, \$30; 1 horse gasoline engine, \$45; 3 horse, \$60; 6 horse, \$125; 10 horse, \$175. Boilers and Engines from 1 to 100 horse, carried in stock for immediate shipment. CASEY BOILER WORKS, Springfield, Ohio.

SAVE MONEY on Berry Boxes and Baskets

Fruit and Vegetable Boxes and crates, etc., supplied of all kinds. Write for free money-saving catalog and price list. New Albany Box & Basket Co., New Albany, Ind. Largest Factory of Its Kind in the Country.

A Neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

penses. They have found that by pursuing this policy, they are able to sell direct to users their simple Davis separator at a price but little more than half what other standard machines are selling for. They claim it to be one of the easiest running, cleanest skimming, easiest cleaned machines on the market. Write to the Davis Cream Separator Co., 56 B. N. Clinton Street, Chicago, for their catalogues. Not necessary to write a long letter, a postal will do. Just address as above and say: "Send me your catalogue No. 126." It will come promptly.

RICKETY FENCES DEPRECIATE FARM PROPERTY.

"The clothes don't make the man—but they help," says the old proverb. Good fences don't increase fertility, but they make the market prices higher. Take two farms—one properly fenced—the other with gaping holes for stock to rush through to the neighbor's fields; with tumble-down posts and dilapidated boards, half up—half down; which will you buy? Which will bring the most at a forced sale?

Wise farmers are looking at all these outward appearances. They are discarding the old, decaying, profitless wooden fence. They are replacing it with one that is strong and durable like the Brown Fence. This is a fence that farmers say is at least one-fourth heavier than most woven-wire fences; that it doesn't get "baggy or saggy;" that is easily put up. When a Brown Fence is up, it is up "to stay up."



Two more good things that the Brown Fence and Wire Company, Cleveland, Ohio, do for the farmer. 1st: They send a free sample of the fence so that every man can examine it at his leisure. He can hammer it, file it, dip it in acid,—test it any way he chooses. The sample will be no better than the actual wire sent him when he pays his money. 2nd: They pay the freight on all orders of forty rods and over. This is a great convenience. A man knows exactly what his fence will cost laid down at his home station. Prepaid freight usually is delivered sooner than the "bill to follow" kind. A 56-page catalogue gives a detailed explanation of 138 different styles of fences for poultry, hogs, horses, bulls and stock of all kinds. It is sent free to anyone.

Scott Co., Ind., Oct. 28, 1907.

Please renew my subscription to The Southern Planter, your valuable paper of high-grade literature.

A. S. CHITTY.

SHIP ME YOUR

OLD METALS

HIDES

RUBBER

SCRAP IRON

Car Lots a Specialty

**50,000
Hides Wanted**

Write for Prices.
Satisfaction Guaranteed.
No Commissions.

CHECKS SENT SAME DAY FREIGHT BILLS ARE MARKED PAID.

Clarence Cosby,

Established 1890.

RICHMOND, VA.

**LARGEST DEALER IN
Scrap Iron, Metals, Hides,
Etc., in the South.**

REFERENCES:

National Bank of Virginia,
Bank of Richmond,
Bradstreets and Dun.

The Famous PAGE FENCE

The Pioneer Woven Wire Fence is the best fence in the world for any purpose. Twenty-five years of experience, science and skill in every rod of a Page. Twice as strong, durable and economical as any other fence. Requires but few posts. It means money to you to learn about a Page Fence. Folder and Catalog free. Write a postal for them now.

PAGE WOVEN WIRE FENCE CO.
Box 5115, Adrian, Mich.

Do You Want a Wire

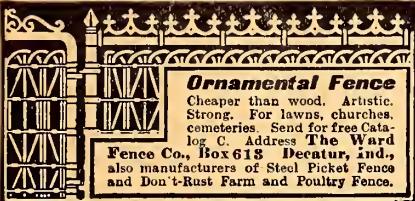
FENCE

That will always be rigid and firm? That can not sag, and that will last a lifetime? Our Fence Book, which is sent FREE, with our catalogue and price list, tells how to build this kind of a fence for 12c. a rod up.

We Pay Freight

On \$25 worth and guarantee satisfaction or money refunded. Agents wanted. Write to-day

NICKEL PLATE FENCE CO. Box 17, Manistee, Mich.



Ornamental Fence

Cheaper than wood. Artistic. Strong. For lawns, churches, cemeteries. Send for free Catalogue. Address The Ward Fence Co., Box 613, Decatur, Ind., also manufacturers of Steel Picket Fences and Don't-Rust Farm and Poultry Fences.

MANLOVE AUTOMATIC GATE

Saves time, adds to value, safety, beauty and pleasure of home.
MANLOVE GATE CO., 272 Huron St., Chicago, Ill.

COIL SPRING FENCE

Made of high carbon Steel Wire. Horse-high, Bull-strong, Chick-en-tight. Sold direct to the Farmer at lowest manufacturers prices on 30 Days Free Trial, freight prepaid, 100 page Catalogue and price-list free.

KITSELMAN BROS., MUNCIE, IND.



LAWN FENCE

Many designs. Cheap as wood. 32 page Catalogue free. Special Prices to Churches and Cemeteries. Coiled Spring Fence Co., Box Q, Winchester Ind.



IRON FENCE

LOW PRICE HIGH GRADE — CATALOGUE FREE.

DOW WIRE & IRON WKS. LOUISVILLE, KY.



Wire Fence 29c

48-in. stock fence per rod only. Best high carbon coiled steel spring wire. Catalog of fences, tools and supplies FREE. Buy direct at wholesale. Write today.

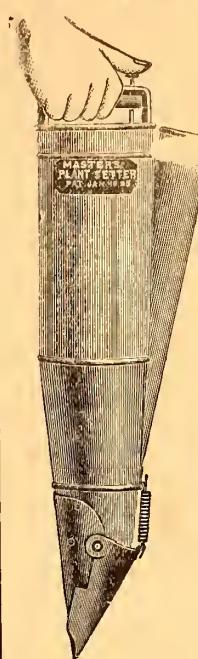
MASON FENCE CO. Box 80, Leesburg, Va.

THE UNIVERSITY OF VIRGINIA AND THE V. P. I.

It seems to us a most lamentable thing that the University of Virginia should attempt to use its recognized prestige and standing in the State to induce the Legislature to deprive the Virginia Polytechnic Institute of the honor of making the Geological Survey of the State upon which it has already done much work through Prof. Watson formerly of the faculty of the V. P. I., but now of the University. Conjointly with State Board of Agriculture the V. P. I. started Prof. Watson on the work and the results of his labors to this time are now published by the University of Virginia as though the work had been done by that Institution. Co-incidentally with the publication Senator Rison has introduced a bill to transfer the whole work to the University and this in the face of the fact that the V. P. I. is equipped to a great extent with the needed facilities for doing the work of the survey and the analysis of the soils and the assaying of the minerals and is making the necessary appropriations for the establishment of a mining and geological school. We are glad to see that Dr. Barringer has taken up the gauntlet thrown down by Senator Rison and Dr. Alderman and in one of the most cogent and forcible arguments we have ever seen left those two gentlemen with not a leg to stand on in defence of their proposition. We cannot think that the Legislature will disregard this protest and invest an institution which or ought to be purely an academic and humanities school with a work which so strictly belongs to a school of practical and applied science like the V. P. I., especially after that institution has shown its ability to do the work and expended money in equipping the necessary laboratories and working force. There is abundant work for the University of Virginia to do without thus seeking to trespass upon the field of work of the V. P. I. and we would strongly urge that the farmers of the State stand by their College and instruct their representatives to support Dr. Barringer in his protest against the passing of the Rison bill. The farmers and the mechanics of the State are deeply interested in knowing the nature of the soils and their fitness for different crops and the mineral riches of the same. This they can learn much more certainly and quickly through the work of the V. P. I. which was established and endowed by the Nation to do just such work and keep in touch with the farmers and the workers in the mechanical arts. The doctors, lawyers, parsons and literati of the University can have little interest in such research work and the faculty of the University should not be encouraged or helped to undertake it. "Ne sutor ultra crepidam."

THIS CUT REPRESENTS

MASTERS



TOBACCO, CABBAGE, TOMATO AND SWEET POTATO PLANTER.

Has been thoroughly tested in the field during the past three seasons and every suggested improvement has been adopted, so that we now offer the dealers and growers the grandest little tool ever devised for setting all kinds of plants. Does better work than can be done by hand and more than twice as fast. Will set plants cheaper than the horse planter, acre by acre. Will do perfect work where the horse planter will not work at all — amongst rocks and stumps and on side-hill land, and far more satisfactory in every way. For full particulars, wholesale and retail price, address

COUNTY AGENTS WANTED.

MASTERS PLANTER COMPANY,

178 So. Water St., Chicago, Ill.

SAN JOSE SCALE

And all kinds of insects and parasites that infest your plants and trees can be killed by spraying with

Good's Caustic Potash Soap No. 3

Insecticide fertilizer. Dissolves easily in water. Protects cabbages, fruits and flowers. Makes plants grow and keeps them healthy. Free from poisons. Endorsed by

U. S. Department of Agriculture.

Write for free booklet, "A Pocket Manual of Plant Diseases." A postal will do.

JAMES GOOD,
Original Maker, 959 Front Street,
Philadelphia.

FUMA kills Prairie Dogs, Weed Chucks, Gophers and Grain Insects. "The wheels of the Gods grind slow, but exceedingly small." So the weevil, but you can stop their grind with

Fuma Carbon Bi-Sulphide as others are doing. It fumigates poultry houses and kills hen lice.

Edward R. Taylor, Penn Yan, N. Y.

CUTAWAY TOOLS FOR LARGE HAY CROPS.

Three of Clark's Intense Cultivators produced this year on 14½ acres, 161 tons of well dried alfalfa, timothy and redtop hay. If you want to know how, enclose a 2-cent stamp to GEORGE M. CLARK, Higganum, Conn.

Please mention The Southern Planter.

PATENT WHAT YOU INVENT.



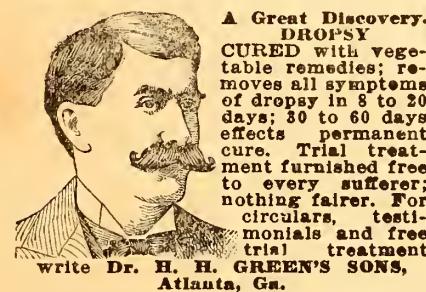
Your ideas may bring you a fortune! Cash offers for certain inventions. Free Book gives list of inventions wanted; tells how to protect them. Write for it. Patent obtained or fee returned. No charge for report as to patentability. Send sketch or model. Patents advertised for sale free.

Woodward & Chandlee, Attys., F Street, Washington, D. C.

PATENTS SECURED OR FEE RETURNED

Send sketch for free report as to patentability. GUIDE BOOK AND WHAT TO INVENT, with valuable list of inventions wanted sent free. One Million Dollars offered for one invention; \$16,000 for others. Patents secured by us advertised free in World's Progress. Sample free.

EVANS & WILKENS, 848 F Street, Washington, D. C.



CAN CANCER BE CURED? IT CAN.

We want every man and woman in the United States to know what we are doing—we are curing Cancers, Tumors and Chronic Sores without the use of the knife or by X-ray, and are endorsed by the Senate and Legislature of Virginia.

We Guarantee Our Cures.

Kellam Hospital

1615 West Main Street,
RICHMOND, VA.



Address Inquiries to Box 802.

Tell the advertiser where you saw his ad.

DAVID AND GOLIATH.

(A true and fair account, in common metre, of this single combat, by an Irish bard. Written by Gen'l Basil Duke). Re-published from August, 1903 issue by request.

The brightest boy ould Jesse had
Was David, youngest son,
He was a bould and active lad,
Well looked by every one.

Altho' he had to moind the sheep,
To larn he was so sharp,
Whin other boys wor fast asleep
He'd pratice on th harp.

'Twould make the birds av hiven hide
Their heads to hear him sing.
He'd murther half the country side
Wid pebbles and a sling.

And thin the soothin' ways he knew
To capture young and old;
The female sex—Och, Whillielu!
'Twas there wor' his best hold.

Whin David was some eighteen years
Of age or thereabout,
Betwane the haythen and Judear
A bloody war broke out.

His brothers listed for the war—
Begorra! they wor' daisies;
His father tuk a contract for
To sell the army chases.

"David," the ould man said wan day,
"You'd loik a little thramp,
Jist load some chases on the dhray
And take 'em down to camp."

He dhrov to camp and sought straight-way

The commissary's tent;
He got a voucher for his pay,
Thin to his brothers went.

He found him lookin' mighty blue
And in a dhreadful fright;
Retracte was what they wished to do
And divil a bit to fight.

A big black bully, tin foot tall,
Was bluffin' all the Jews,
And throops and staff and Gin'ral Saul
Wor quakin' in their shoes.

Goliath was the the crathur's name
A howlin' Philistine;
His sword was loike the lightnin's
I me,
His staff was loike the pine.

He wore upon his back and breast
Tin thousand pounds of brass;
The shine av him, completely dhressed,
Would smash a lookin' glass.

And ivry day the baste would struth
Inflamed wid dhrink an' pride,
And kept all Israel closely shut
In lines well fortified.

The Steel Shoe
Wear Resisting—Foot Protecting
Guaranteed for a Year

FREE

Our
Booklet
"The
Role of
Steel
in
Shoes"
tells how to save
\$5 to \$10 a year
in working shoes.

BOTTOM made of pressed steel, studded with steel rivets; uppers of soft, pliable, water-proof leather—on the \$2.50 shoe actually better than those of the regular \$3.50 leather shoes; it \$3.50 for 6-inch ordinary \$3.00 leather shoes. Inside is a comfortable hair cushion. Weigh no more than ordinary shoes. They will save you money; keep your feet dry and comfortable, prevent colds and rheumatism. Do not require the usual "breaking in"; easy and soothing to the feet from the first minute you put them on. The Steel Shoe is certain to please and satisfy; you will wonder how you ever did without it. Sizes 6 to 12. Send us your size and \$2.50 for 6-inch high shoes (or \$3.50 for 9-inch) and you will promptly receive the best and most comfortable pair of working shoes the market has ever produced.

STEEL SHOE CO., Dept. I RACINE, WIS.

Make Your Idle Money
Earn You Interest

Write the FIRST NATIONAL BANK of RICHMOND, VIRGINIA, for information concerning its certificates of deposit, so arranged that one per cent. may be collected every FOUR MONTHS through your nearest bank or store.

Our experience proves this form for savings to be the most satisfactory plan yet devised for deposits of \$100.00 or more.

Our Capital and Earned Surplus is

\$1,600,000

JOHN B. PURCELL, President.

JNO. M. MILLER, Jr., Vice Pres. Cashier.

CHAS. R. BURNETT, Assistant Cashier.

J. C. JOPLIN, Assistant Cashier.

FARMERS

Insure Your Buildings, Live Stock, Produce etc., in Virginia Division.

FARMERS' MUTUAL BENEFIT ASSOCIATION.

Best security. Property insured, \$500,000. Average cost per \$1,000 per year \$5.00. Territory limited to counties of Chesterfield, Amelia, Powhatan, Nottoway, Dinwiddie, Prince George, Surry, Charles City, New Kent and James City. For plan and membership write to

CHARLES N. FRIEND, General Agent,
Chester, Va.

ORGANIZED JANUARY 3, 1899.

THE VIRGINIA LANDSCAPE AND MAINTENANCE CO. INC.

416 Watt, Rettew & Clay Building,
ROANOKE, VA.
Entomologists, Foresters, Landscape
Architects, Engineers.
see you.

Paint Without Oil

Remarkable Discovery That Cuts Down the Cost of Paint Seventy-five Per Cent.

A Free Trial Package is Mailed to Every One Who Writes.

A. L. Rice, a prominent manufacturer of Adams, N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powdrpaint. It comes in the form of a dry powder and all that is required is cold water to make a paint weather-proof, fireproof and as durable as oil paint. It adheres to any surface, wood, stone or brick, spreads and looks like oil paint and costs about one-fourth as much.

Write to Mr. A. L. Rice, Manuf'r, 208 North St., Adams, N. Y., and he will send you a free trial package, also color card and full information showing you how you can save a good many dollars. Write to-day.

Bone Phosphate

22½ Per Cent. Phosphoric Acid, 4½ Per Cent. Ammonia.
(Guaranteed Analysis.)

A Pure Animal Bone Fertilizer

In the manufacture of which NO CHEMICALS are used
Sack, 200 pounds.....\$ 3 00
Ton (2,000 pounds)..... 28 50
RICHMOND ABATTOIR,
Box 267, Richmond, Virginia.

YAGER'S LINIMENT

FOR

RHEUMATISM

At the Store 25 cts.

"PRACTICAL FARMING"

Prof. W. F. Massey's latest and best book, is now on sale. It retails for \$1.50 and is worth it. We shall be very pleased to send you a copy at above price and will include a year's subscription to The Southern Planter. Remember, we deliver the book and give you a whole year's subscription for the price of the book, \$1.50.

SOUTHERN PLANTER, Richmond, Va.

A neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

"Come out," he'd bawl, "Come out av there,

Beyant your dirty works;
Come, av ye dare, an' fight me fair,
Ye bloody Habrew Turks.

But ivry faithful Israelite
Said, "Lave the blaggard be.
Av coarse no dacint Jew can fight
Wid such low trash as he."

This sort av thing was well and good
Till David jined the throop,
Whin he the matter understood,
Bedad, he raised a whoop.

"It is a burnin' sin and shame,"
He said, "upon me me word,
To hear this haythen hound defame
The chosen av the Lord."

"And since no other mon has felt
A wish to tan his hide,
I'll fight him for the champion's belt
And fifty pounds a side."

The corp'rill av the guard, he tould
The off'shur av the day
What David said, and he made bould
To mintion it at tay.

The edge-du-kong was in that mess,
And heerd the whole discourse
So he—he couldn't do no less—
Tould Gin'al Saul, av course.

The Chafe of Staff tould the High
Priest
To send pre-emptious ordhers
For David to report in haste
At Gin'ral Saul's headquarters.

But whin the son av Jesse kim
And Saul beheld the lad,
So young, to tinder loike and shlim,
It made him tearin' mad.

"Oh, Holy Moses! look at that,"
Said Saul, "The boy's consate;
How can it be that such a brat
Can match that heavy weight?

"Wid that blood suckin' giant thafe
This baby cannot strhive;
The Philistine, it's my belafe,
Would at him up alive."

Thin David said, "My lord, it's throue,
This sames a rash intint,
But while I weigh but nine stun' two,
I'm full av divilment.

"A lion and a bear kim down
The mountain's rugged side;
I slew the bastes and went to town
And thraded off their hides.

"And since for roarin' bastes like thim
I've found I'm tough enough,
I'm quite convinced that I can thrim
This blaggard haythen rough."

"Avick," says Saul, "ye're full ave
pluck,
And wag your little chin
Loike wan who ra'ly thrusts his luck
And manes to try and win.

Nitrate of Soda

NITRATE SOLD IN
ORIGINAL BAGS

The Nitrate Agencies Company

64 Stone Street, New York

Orders for All Quantities Promptly
Filled—Write for Quotations

Agricultural Lime

ALL GRADES.

CANADA UNLEACHED

Hardwood Ashes.

Any quantity desired and at
bottom prices.

T. C. ANDREWS & CO.,
Norfolk, Virginia.

AGRICULTURAL LIME SCREENINGS.

Cheap in bulk by carload.

Tazewell White Lime Works

North Tazewell, Va.

WANTED Bills to Collect -

In all portions of the United States. No collection, no charge. Agencies wanted everywhere. 25 years' experience. PALMOR'S COLLECTION AGENCY, 311 Main St., Richmond, Va.

RIDER AGENTS WANTED
in each town to ride and exhibit sample
Bicyc. Write for special offer.
We Ship on Approval without a cent
deposit, allow 10 DAYS FREE TRIAL
and prepay freight on every bicycle.
FACTORY PRICES on bicycles, tires
and sundries. Do not buy until you receive our cat-
alogs and learn our unheard of prices and innumerable special offers.
MEAD CYCLE CO., Dept. R223 Chicago, Ill.

A neat Binder for your back numbers can be had for 30 cents. Address our Business Department.

THINK OF THE FUTURE

Profit or Loss

Take no chances on the quality of stock you plant. Thousands of men are now harvesting great crops of choice fruits and getting rich from the trees they bought from

HARRISON'S NURSERIES

SAFE DELIVERY TO ALL POINTS AND SATISFACTION GUARANTEED

During two generations of our successful experience our stock was never so large, never so improved, never so perfect in every respect, as it is this season. Millions of Apple, Peach, Pear, Plum and Cherry Trees; Strawberries, Grapes, and Ornamentals.

Send for Free Catalog, illustrating, describing and pricing the finest varieties in every class and our own growing of Special Leaders.

Investigate Our Offerings Before Buying.

Harrison's Nurseries
Box 84. Berlin, Md.

SEND YOUR ORDER FOR

SEEDS

TO

DIGGS & BEADLES

THE SEED MERCHANTS

RICHMOND, VA.

We are headquarters for superior seeds of all kinds—Garden and Flower Seeds, Grass and Clover Seeds, Cow Peas, Field Beans, Seed Potatoes, Onion Sets, etc. Also Poultry Foods and Supplies—Meat Meal, Bone Meal, Oyster Shells, Mixed Feeds, etc. Southern agents for the celebrated Cornell Incubators and Brooders.

Write to-day for our free catalogue (B). You need it. It helps.

Your correspondence solicited.

NOW READY!

CABBAGE PLANTS

Raised in the open air from seeds of Long Island, Puget Sound, and England.

Varieties: Early Wakefield, Charleton, Early Flat Dutch, Succession and Drumhead. Price, delivered express, Charleston:

\$1.25 per 1,000 to 5,000.

Above 5,000 only \$1.00 per thousand. Special prices on large quantities.

Cash, please.

Alfred Jouannet, Mt. Pleasant, S. C.

"I'll give ye my best coat av mail—
A new spring suit jist made—
Tuck it a trifle in the tail,
And pad the shoulder blade."

But David didn't understand
The use av sich a thing,
And only wanted in his hand
His staff and thrusy sling.

Whin Goliath saw little David approachin', after havin' heard proclamation that a gra'at champion was comin' out to fight him, musha, he laughed for to split his sides; and by reason av what passed bechune them in the way av talk, I dhrap out of po'thry for a bit, bekase, whoile po'thry is moighty foine for sintimintal dialogue, it's no good at all for a ra'al strhong, forst-class, breezy blaggardin' match.

"Oh, Jases!" said Goliath, wid the wather bilin' out av his eyes for laughin', "what sort av thing is that? May the devil admire me!" he says, "iv I don't believe a monkey escaped from an organ grinder."

"Ye'll foind me a moighty bad thing to monkey wid," says David, "ye big thafe, wid a pot on your head loike a cupolo on a sthame fire engine, and your dirty black mouth loike the hole av a coal cellar."

"Ye little skinned pole-cat," says Goliath, beginin' to grow mad, whin he diskivered that David's rhetorick was suparior to his, "do ye think I'm a dog that ye've got a stick to bate me wid?"

"Bedad," says David, "I wouldn't be aither doing a dacint dog such injustice; but it's dog mate I'm goin' to make av ye."

"Hear that!" says Goliath, "'arrah. Now, tache your gran-mother to feed ducks!"

"Dhry up!" says David, "bad scran to ye," he says. "Ye haven't the since av a catfish. By the light that shines, your bad grammar gives m a cramp in the stummick." Och, David had a tongue in his head loike a Jews-harp.

"Tear an' oun's!" says David, "I'll give the buzzards a picnic wid yer karkiss, and shure it'll make them sick to ate ye."

Ye're a liar," says Goliath.

"Ye're another," says David, "an an ophthalmic cyclops to boot."

Wid that Goliath lost his temper intoirely. He pawed up the ground and kim at David wid his eyes shut, a-bellowin'—and that brings me back to me pothry:

Goliath poised his mighty sword
'Twas fifty feet in length,
And unto David dhrawin' near
He punched with all his strength;

But David was surprisin' quick
And sphry upon his pins;
So dodgin' nately wid his shtick
He whacked Golath's shins.

SEED CORN

THE EXCELSIOR-A PEDIGRED CORN

Seven generations in ear-row breeding plots, under most intensive methods known in the breeding up of corn has produced in my EXCELSIOR a corn of greatest productivity and perfection. In a variety test plot of 35 leading varieties of corn conducted under the supervision of the Maryland Experiment Station, 1907, the Excelsior far outyielded all other varieties. At the State Corn and Wheat Show, held 3d and 4th December last in Baltimore, Excelsior won first prize in every class for white corn and won the beautiful Bolgiano Cup as sweepstakes prize for the best corn, any color, in the show. The net winnings of my grains at the above show was \$135, which was paid in gold. This corn has never failed to take first prize at all fairs and corn exhibits wherever shown.

Corn Booklet upon application to
W. OSCAR COLLIER, Proprietor
Springwood Seed Farms, Easton,
Talbot County, Md.

SEED CORN

The foundation stock is the best of the prolific varieties; thoroughly acclimated, true to type, bred to grow thick, seed carefully selected for six years; best for Southern planting.

90 acres in 1907 average 50 bushels per acre, and 16 acres made 100 bushels per acre, weighed at the shredder. Price, \$2 per bushel, \$1.25 per half bushel. Special price on large lots.

In ordering state whether seed is wanted for upland or bottoms.

W. R. WALKER, UNION, S. C.

SEED CORN.

I offer a choice lot of carefully-bred Seed Corn of both white and yellow varieties, yielding as much as 85 bushels per acre. Write me for prices, stating quantity wanted.

T. O. SANDY,
BURKEVILLE, VA.

SEED CORN.

Collier's Excelsior.—First prize White Corn Virginia State Fair, 1907, and wherever shown. My stock is field selected and shelf dried. Seed either on the ear or shelled. State quantity and write for prices at once.

J. B. McCOMB, Somerset, Va.

GINSENG Plants and Seeds for Fall and Spring delivery 1906 and 1907. Popular prices. For further information address C. F. CARTER, Seven MILE FORD, VA.



Ferry's Seed Annual
for 1908 is FREE. Address
D M. FERRY & CO., DETROIT, MICH.

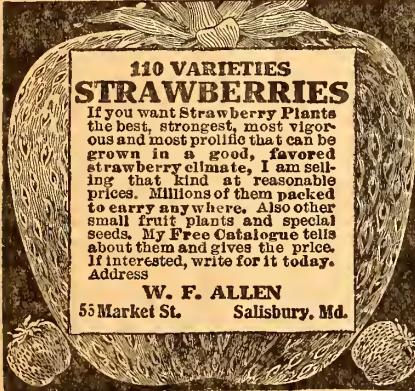
PLANT

THE NEW "WARD" BLACKBERRY.

I offer for spring of 1908, strong, No. 1 Plants at \$2 per 100 No. 2 at \$1.50 per 100. Send for descriptive circular of the Ward.

Full line of Fruits Trees and Small Fruit at planters' prices. Send for price list.

FRED SHOOSMITH, HOYT, PA.



110 VARIETIES STRAWBERRIES

If you want Strawberry Plants the best, strongest, most vigorous and most prolific that can be grown in a good, favored strawberry climate, I am selling that kind at reasonable prices. Millions of them packed to carry anywhere. Also other small fruit plants and special seeds. My Free Catalogue tells about them and gives the price. If interested, write for it today. Address

W. F. ALLEN
55 Market St. Salisbury, Md.

GOOD SEEDS THE BEST EVER GROWN

Prices lowest of all. Postage paid. A lot of extra packages given free with every order of seeds I fill. Send name and address for my big catalog. Over 700 engravings of vegetables and flowers. R. H. SHUMWAY, Rockford, Illinois

CALIFORNIA PRIVET

Best of hedge plants—grows anywhere, easily pruned, almost an evergreen. Trims beautifully into all sorts of attractive designs. Height 18 in. to 5 ft. Address HARRISON'S NURSERIES, BOX 84, BERLIN, MD.

Wid pain the giant howled and grinned
And dhrapped both shield and lance
To rub his legs the lick had skinned;
Thin David saw his chance.

Takin' a brick from out his srip,
He put it in his sling,
And, whirlin' it 'round head and hip,
He let it dhrive full swing.

Right to the mark the darnick flies,
As straight as to a hod;
It smote the wretch betwane the eyes
And stretched him on the sod.

Thin David, for to prove him dead,
In sight of all beholders,
Chopped off his unbelavin' head
From his blasphemous sholders.

* * * * * * * * * * * * * * * *
Whin the Phaysian sailors sought
Long since ould Erin's strand,
A prince of David's blood they brought
Who settled in the land;

From him the Irish race had birth,
And that's why we delight in
Bevant all other thrives on earth,
The harp's swate shhrains and
fightin'.

That this surmise is in nowise thin
Can easily be shown,
For sthick and harp have ever been
As Erin's imblims known.

So let her inimies beware
How they indulge their hate;
Let England thremble lest she share
Goliath's dhrateful fate.

At the Virginia State Poultry Show held in Richmond January 9-15, 1908, Black, the Black Langshan breeder of Tazewell, Va., a regular advertiser in the Southern Planter, showed a big string of his fine Black Langshans and as usual carried off the best part of the prizes. He won first cock, first, fourth and fifth on hens, first, second and fourth on cockerels, first, third, fourth and fifth on pullets, the association ribbon for best display of Langshans and four special ribbons given by Eastern Langshan Club for best shaped male, best shaped female, best colored male and best colored female. In addition one of the most coveted prizes in the show, the Purina Feed Prize Cup, for highest scoring bird in the entire show fed on Purina Feed, all breeds competing, was awarded to Mr. Black's first premium B. Langshan cockerel. The judge stated that Mr. Black's birds were better than any Langshans shown at the Madison Square Garden show and the equal of any Langshans he had seen this season.

Montgomery Co., Kans., Dec. 9, 1907.

The Southern Planter is a splendid magazine and a sucessful educator. There is nothing wanting from its pages. H. K. BAKER.

PLANTING SEED

Sugar Loaf and King's Improved Cotton, the earliest and most prolific varieties, yielding one to three bales per acre.

\$1.00 per bushel F. O. B. here.

COKE'S PROLIFIC CORN

The highest yield on record. Write for booklet as to how this corn has been improved to the highest standard of perfection.

\$1.50 per bushel F. O. B. here.

SUGAR LOAF COTTON FARM, YOUNGSVILLE, N. C.

COW PEAS AND SOJA BEANS

We are headquarters. Nothing better for hay and fertilizing purposes. Write for prices on any quantity. Free Bulletin on the "Cow Pea" and catalogue "I" on request.

HICKORY SEED CO.,
Hickory, N. C.



50,000 Keiffer Pear Trees for Sale!

These are in surplus, and I can make most favorable terms, if ordered quick. This pear is the great money-maker of the South.

JOHN A. YOUNG, Greensboro, N. C.



Always mention The Southern Planter when writing advertisers.

STRAWBERRY PLANTS

Fruit Trees, etc. Strawberry Plants, \$1.75 per 1,000 in 5,000 lots or over; Trees, 8c. each. Send for free catalogue. JOHN LIGHTFOOT, East Chattanooga, Tenn.

 Berry Plants, healthy, true to name, from young beds, as good as grow; Asparagus Roots; Choice Seed Corn; Barred Rocks, Eggs, etc.; 30 years' experience. Catalog free. J. W. Hall, Marion Station, Md.

CHOICE**Seed Potatoes**

For sale—Irish Cobbler and Extra Early White Rose. Prices reasonable.

CHARLES BELL, West Point, Va.

ALFALFA

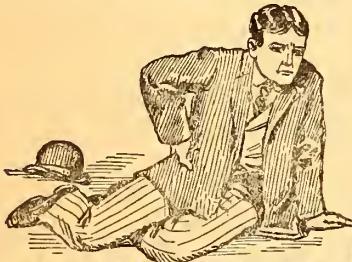
All Northern Grown and guaranteed to be 99 per cent pure. Should produce hay at \$40.00 per acre annually. Write for Free Sample and instructions on growing.

GRAIN AND GRASS SEEDS

Northern Grown and of strongest vitality. We invite you to get Government Tests on our samples. Send for Cat. No. 35

THE J. E. WING & BROS. SEED CO.

Box 235, Mechanicsburg, Ohio



**ACCIDENTS
HAPPEN
EVERY DAY
PROMPT APPLICATION OF**

**YAGER'S
CREAM CHLOROFORM
LINIMENT**

PREVENTS SERIOUS RESULTS.

FOR

**SPRAINS, BRUISES,
STRAINS, SORE MUSCLES.**

CURES

**RHEUMATISM,
LAME BACK, ETC.**

ALL DEALERS SELL IT.

25¢

**GILBERT BROS.
& Co.
BALTIMORE**

REPORTS.

U. S. Department of Agriculture, Washington, D. C. Report of the Secretary of Agriculture, 1907. This is, as usual, a most complete and interesting report, and every farmer ought to secure a copy from his representative. It presents a marvellous record of the work of the farmers of the country.

The value of the total farm productions in 1907 exceeded that of 1906, which was far above that of any preceding year. The total value for 1907 is \$7,412,000,000, an amount 10 per cent. greater than the total for 1906; 17 per cent. greater than that of 1905; 20 per cent. above that of 1904; 25 per cent. in excess of that for 1903, and 57 per cent. greater than the total value for 1899. If we let 100 represent the total value for 1899, the value for 1903 would be represented by 125; that for 1904 by 131; for 1905 by 134; for 1906 by 143, and the total value for 1907 by 157.

The farmer depends not alone on his field crops. He produces meat animals; he keeps dairy cows; he raises sheep for mutton and for wool; he raises horses and mules; he keeps poultry. The animals sold from farms and those slaughtered on them in 1907 were worth about \$1,270,000,000, or nearly twice as much as the cotton crop.

Dairy and Poultry Products. The dairy products of the country alone were worth nearly \$800,000,000 in 1907, or much more than any crop save corn. Prices of both butter and milk have advanced.

The poultry and egg products for 1907 should be estimated at more than \$600,000,000 in value. In fact, these products were worth more than the wheat crop. In 1899 the farm price of eggs averaged a trifle over 11 cents per dozen; in 1907 it was over 18 cents. Dressed poultry sold in New York in 1899 for 10 3-4 cents a pound; in 1907 for nearly 15 cents.

During the fiscal year 1907 the exports of farm products exceeded the imports by \$444,000,000, a balance that has been exceeded only four times—in 1898, 1899, 1901 and 1902.

Our foreign credit is sustained mainly by our farmers. For eighteen years, beginning with 1890, the farmers have not failed to secure a favorable balance, the lowest being that of 1895—\$193,000,000; and the grand aggregate of the balances of trade in farm products for the eighteen years is \$6,500,000,000. At the same time our foreign trade in non-agricul-

Northern Virginia Farms

Here Are a Few Bargains.

No. 132. Contains 50 acres of smooth, gently-rolling, fertile land divided into four fields; pure running stream running through the farm. The land is all in good state of cultivation; checocoate clay with stiff subsoil. The house is a comfortable 6-room dwelling, excellent well at the porch; stable, corn house, granary, all in good condition. Farm is situated in Loudoun County on a good level road, 2 1/2 miles from the station. Price, \$2,000.

No. 130. This farm contains 270 acres; situated in Loudoun County, 7 miles from the station in a thickly settled community; close to school, church, post-office, store and two mills; rural delivery at the gate. This land is all comparatively level, all a good quality clay soil; adapted to bluegrass and grain of all kinds. It is naturally a fine quality of land, but has been worked hard, but there are no galls or gullies. It has one of the finest bearing apple orchards in the county. The dwelling is a 6-room house in fair condition; a large brick storehouse and a good stable with room for 8 horses. This property belongs to a widow lady, whose husband has recently died, and she desires to sell at once, and has priced the property at a very low figure to induce a quick sale. I can sell this property for \$12 per acre, one-third cash, and the balance on very easy terms.

No. 131. A handsome Rockbridge County farm of 316 acres, situated 1 1/4 miles from a live, active and very progressive town. This farm is a natural stock grazing farm in a high state of cultivation and productiveness; fenced with modern woven wire fence. The buildings are all in excellent condition, the most of them are new and of modern plan; they consist of a handsome 8-room brick dwelling, plumbed for hot and cold water; a large cattle barn, horse and hay barn, large double corn crib, wagon and machine sheds, cow stable, carriage house and other small outhouses, all in excellent repair. Farm is watered by springs, and branches in every field. Located in a fine neighborhood of refined citizens. Price, \$16,000, on easy terms.

Farm No. 76. Contains 243 acres, 25 acres in good timber, balance is cleared and well fenced with wood and wire fences. This farm is one of the finest little farms in Loudoun County. Every field has been limed, and the land is in a high state of cultivation. It is natural bluegrass and clover land. Two-thirds of the land is now well set in clover and will yield enormous crops next year. The farm is situated on an elevated point, on rolling ground, with a fine view of the mountains on one side, and the other side is a beautiful stretch of cultivated lands. This farm is all smooth, free from stones and stumps, rolling enough to drain well, but would be considered comparatively level. The house is an 8-room house, perhaps 50 years old, but well preserved. Fine water. There are all the necessary outbuildings, in good condition. Horse barn with stalls for 10 horses and cattle barn with stalls for 25 head. Excellent orchard of all kinds of fruit. This farm is one mile from railroad station. Price, \$37.50 per acre.

Send for my new List.

WM. EADS MILLER, HERNDON, VA.

ATTENTION

HOMESEEKERS AND INVESTORS.

I sell and exchange Virginia Real Estate of all classes, such as Grain, Dairy, Fruit, Stock, Truck, Poultry and Bluegrass Farms, Village Homes and Business Places of all classes. The reason I make specialty of the two suburban counties—Loudoun and Fairfax—they offer the homesekers more advantages combined than any country known to me. This fine portion of Virginia, extending from the National capital to the top of the Blue Ridge Mountains, is not only beautiful and healthy, but is very accessible to Washington and Alexandria cities by rail and pike, which gives all producers a fine home market.

My facilities for locating you in this section of Virginia are second to none. State what kind of property would interest you. I have a large number and great variety of properties, and can very likely suit you. New catalogue and map mailed free on request.

W. H. TAYLOR, Herndon, Va.

DESIRABLE HOME FOR SALE.

Situated in Fairfax County, Va., one mile north of Centreville, 25 miles west of Washington, D. C., the following described property: Thirty acres of productive land, divided into three fields; about four acres in orchard, the trees now loaded with apples. Half acre in grapes. Good grist mill and saw mill, both in operation and doing good business. Grist mill operated by either water or steam. Substantial and comfortable stone house containing six rooms and cellar and annexed kitchen. Plenty of shade in yard and hedge in front of house. Well of pure water within 50 feet of door.

Three thousand dollars will buy this place. Terms, one-half cash, balance in one and two years. Death of recent owner only reason this property is offered for sale. This is a business opportunity that it will pay you to investigate. For further information address J. GIBSON KEMPER, Clifton Station, Virginia.

F FARMS For Sale.

If you want a farm to raise grass, grain, stock, fruit, or tobacco, buy from us. Chocoloate soil with red subsoil. Address

W. W. BARNES & CO.,
Land and Timber Agents,
AMELIA C. H., VA.

Virginia Farms

HANDSOME COUNTRY HOMES AND
HIGH-GRADE FARM LANDS A
SPECIALTY.

J. E. WHITE, "THE LAND MAN,"
Charlottesville, Va.

In Virginia

100 Stock Farms, 50 Colonial Homes, 10 Hunting Preserves. Free list.

H. W. HILLEARY CO., CHARLOTTESVILLE, VA.

tural products for the same period has shown an aggregate adverse balance of \$456,000,000.

Thus a great stream of wealth has constantly been sent from farms to foreign countries to offset the adverse balance of trade in commodities other than agriculture, to pay the ocean freight cost on imports conveyed in foreign-owned ships, and to pay the interest, dividends, and principal on investments in the United States by foreigners. It is the farmer who has sent credit to expatriated Americans; it is he who has provided the immigrant with millions to send every year to the loved ones in the old country; and, if there is still any credit to dispose of, the farmer has provided the American traveller in foreign countries with his pocket money.

Office of the Secretary. Food Inspection Decision 83.

Bureau of Chemistry, Circular 37. General Results of the Investigation, Showing the Effect of Sulphurous Acid and Sulphates Upon Digestion and Health.

Office of Experiment Stations. Experiment Station Record, Vol. XIX, No. 4.

Bureau of Plant Industry. Bull. 116. The Tuna as Food for Man.

Forest Service. Circular 119. Consumption of Tan Bark and Tanning Extract in 1906.

Circular 120. Consumption of Pulpwood, 1906.

Circular 121. Wood Used for Distillation, 1906.

Circular 123. Production of Slack Cooperage Stock, 1906.

Circular 124. Consumption of Cross Ties, 1906.

Circular 126. Forest Tables; Lodgepole Pine.

Circular 129. The Drain Upon the Forests.

Circular 131. Practical Forestry on a Spruce Tract in Maine.

Bureau of Soils. Certain Organic Constituents of Soils in Relation to Soil Fertility.

Bureau of Soils. Bull. 49. The Action of Water and Aqueous Solutions Upon Soil Carbonates.

Farmers' Bull. 310. A Successful Alabama Diversification Farm.

Farmers' Bull. 311. Sand-Clay and Burnt-Clay Roads.

Farmers' Bull. 312. A Successful Southern Hay Farm.

Farmers' Bull. 313. Harvesting and Storing Corn.

Arizona Experiment Station, Tucson, Ariz. Bull. 55. Cement Pipe for Small Irrigating Systems and Other Purposes.

Kansas Experiment Station, Manhattan, Kan. Press Bull. 158. Destroying Pocket Gophers.

Maryland Experiment Station, College Park, Md. Bull 120. Sweet Corn Investigations.

These Are Bargains

No. 150. Directly on railroad, convenient to Washington, D. C., 600 acres good clay land; 200 cleared, balance logged, but much cord wood left; splendidly watered, and will make fine stock or dairy farm. Very cheap.

No. 204. Well improved with large brick house and all necessary outbuildings, 335 acres of fine blue grass land, in Loudoun county, Va. Well watered. Nothing better for stock. \$30 per acre. A bargain.

No. 227. Very productive red clay soil, 375 acres, with good stone house and other outbuildings. Suitable for any purpose, but unusually well adapted to dairying, being well watered and only a mile and a half from railroad; only an hour and a quarter from Washington, D. C. Very reasonable.

STEPHENSON & RAINY,
Real Estate,
HERNDON, VIRGINIA.

We Are THE LARGEST DEALERS IN FARM PROPERTY.

in the South, and have for sale the finest stock, dairy and general utility farms in Maryland and Virginia; all prices, all sizes, all bargains. Property near Washington at prevailing prices is the best investment in the country. Farmers get highest prices and are all prosperous. Finest markets in America. If contemplating change, come this way, sure. Catalogue and descriptive literature free. THE SOULE CO., Washington, D. C.

Old Virginia Farms.

Climate and Productiveness unequalled. Largest sale list in State. For full particulars and Free Catalogue address

CASSELMAN & COMPANY,
RICHMOND, VA.

Virginia Farms

MOST SELECT LIST, and in all sections of the State.

FREE CATALOGUE.
R. B. CHAFFIN & CO., Inc.
Richmond, Va.

BEFORE

Buying or Selling

A FARM

In N. W. Virginia, communicate with
DR. L. S. CRITTENDEN,
ASHBURN, VA.

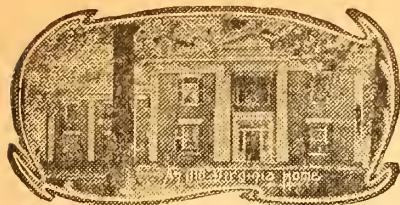
VIRGINIA FARMS

\$3 PER ACRE AND UPWARDS.

Easy payments. Catalogue Free. Loans made on country Real Estate. GEORGE E. CRAWFORD & CO., 1009 East Main Street, Richmond, Va. Established 1875.

BLUE GRASS STOCK AND FRUIT FARM

Send for illustrated catalogue No. 948.
WALKER & MOSBY, Lynchburg, Va.



VIRGINIA FARMS \$8 per Acre and up

With improvements. Good productive soil, abundant water supply and best climate on earth. Near railroad and good markets with best church, school and social advantages. For list of farms, excursion rates and our beautiful pamphlet showing what others have accomplished, write to-day to F. H. LA BAUME, Agric. and Indl. Agt., Norfolk & Western Ry., Box 50, Roanoke, Va.



"In the Green Fields of Virginia."

Homes for all; health for all; happiness and independence for all. All sizes of Farms at corresponding prices, but ALL reasonable.

MACON & CO., ORANGE, VA.

FARMS

Great bargains in Virginia Farms, Mineral and Timber Lands. Free catalogue on application. Agency established 1875. Address

W. A. PARSONS & CO.,
C. & O. Main St. Depot, Richmond, Va.

Farms, Orchards, Timber,

Cotton Lands in Virginia and the South.
ALEXEMARLE IMMIGRATION SOCIETY,
Charlottesville, Va.

VIRGINIA FARMS

Farms of any size with improvements. Prices in reach of all. Free list.

PORTER & GATES, Louisville, Va.

TREES

Genesee Valley grown; 150 acres. Established 1869. Never had San Jose scale. "Not the cheapest, but the best." Catalogue free. George A. Sweet Nursery Co., Box 40, Dansville, N. Y.

IN THE STABLE ALWAYS USE YAGER'S LINIMENT

NOTHING LIKE IT FOR HORSES.
YOUR DEALER HAS IT. 25 CENTS.

GILBERT BROS. & CO.
BALTIMORE.

Please mention The Southern Planter.

Maryland Agricultural College, College Park. Quarterly Bull. Catalogue of Ten Weeks' Special Course in Agriculture.

Mississippi Experiment Station, Agricultural College, Miss. Bull. 99. Fertilizers.

Bull. 100. Farmers' Institute Bull., 1906.

Bull. 101. Report of Work at McNeill Branch Experiment Station for 1906.

Bull. 102. How to Control Injurious Insects and Noxious Plant Diseases.

Bull. 103. Farmers' Institute Bull., 1907.

Nebraska Experiment Station, Lincoln, Neb. Bull. 101. Dairy Record for Ten Years' Cost of Butter Fat Production.

New York Experiment Station, Geneva, N. Y. Bull. 288. Ringing Detrimental to Tomatoes and Chrysanthemums.

Bull. 289. Unprofitable Orchard Fertilizing.

Bull. 291. Inspection of Feeding Stuffs.

Purdue Experiment Station, Lafayette, Ind. Circular 8. Beef Production.

Circular 10. The Use of Fertilizers on Southern Indiana Soils.

Rhode Island Experiment Station, Kingston, R. I. Bull. 123. Rearing and Management of Turkeys With Special Reference to the Blackhead Disease.

Virginia Weather Service, Richmond, Va. Report for November, 1907.

Agricultural Department for the West Indies, Barbadoes, W. I. Journal of the Department, Vol. VIII, Nos. 1 and 2.

"MODERN SILAGE METHODS."

We are just in receipt of a copy of the revised and enlarged 7th edition of that valuable book "Modern Silage Methods," published by the Silver Co., Salem, Ohio, manufacturers of the well-known "Ohio" Ensilage Cutters. The contains 234 pages—library size, and has over 40 illustrations to help make things plain. Certainly nothing ever published covers the silage subject so completely. It answers every question you can think of. Former editions of this have been used as a standard Text Book by many Agricultural Colleges. Everyone who is at all interested in the silage subject should read their ad. which appears on another page of this issue.

Campbell Co., Va., Sept. 4, 1907.

I am very much pleased with The Southern Planter, and consider it one of the best journals adapted to Virginia agriculture that I know of. I have taken it about eight years, and as long as I stay South expect to continue. S. A. RUTHERFORD.



Gives Surprising Results

No pest is quite as discomforting to an animal as the common sheep tick—they actually suck the very life blood of the sheep. All sheep have ticks. Why let the tick eat up your profit? Kill him on the spot.

Instant Louse Killer

is guaranteed—your money back if it does not do as we claim.

It is a powder which may be used in zero weather, and in less time than it takes to prepare a dip. No slop, no muss, no danger. It is the formula of Dr. Hess (M.D., D.V.S.) and destroys lice on horses and cattle, bugs on cucumbers, squash and melon vines, cabbage worms, rose slugs, etc. It is also a disinfectant and deodorizer. In cans with perforated top. Look for the word "Instant" on the can.

Sold on a written guarantee.

1 lb. 25c. } Except in Canada
3 lbs. 60c. } and extreme
West and South.

If your dealer cannot supply you we will forward 1 lb. can by mail or express, prepaid, for 35 cents.

MANUFACTURED BY

DR. HESS & CLARK,
Ashland, Ohio.

EARLY HATCHED CHICKENS
Make early broilers, next winter's early layers. Old Biddy takes her own time, which is generally when you are not ready.

"Model" Incubators and Brooders are always ready—less trouble, no lice—every advantage over the sitting hen.

"Model" Incubators and Brooders are manufactured by Chas. A. Cyphers, of Buffalo, N. Y. We are his authorized agents. Catalogue is free. Ask for it.

If you have not received our Poultry Supply and Feed Price List you are not on our mailing list. Send in your address—do it now.

W. J. TODD,
426 North Sixth Street,
Richmond, Va.



NEWTON'S REAVE AND COUCH CURE
A VETERINARY SPECIALTY
15 yards of canvas. One to two cans will cure Reaves. \$1.00 per can. Of dealers, or express prepaid. Send for booklet. The Newton Remedy Co., Toledo, O.

Well Rounded Porkers

This is a Prussian Stock Tonic

Look, and he's proud of it.

His owner is proud of it too, for when he takes this hog, together with the rest of the herd, to market, he gets the highest price for him.

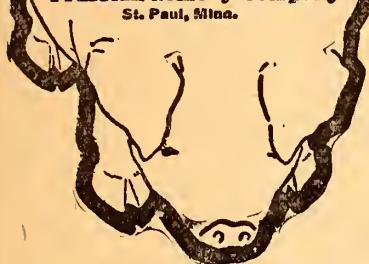
Hogs, whose feed has contained a little of Prussian Stock Tonic, are always healthy—the meat is fine flavored, tender and juicy, the kind that is continually sought after to supply the best markets.

There are over 1200 doses in the

Big \$3.50 Pail

enough to add a good many easy dollars to your hog money. Write and tell us what stock you own, and we will send you our Stock Raisers' Manual, a book that tells many valuable things about raising stock.

Prussian Remedy Company
St. Paul, Minn.



STOCK OWNERS, USE

FOUTZ'S

HORSE

A

CATTLE

POWDERS

The oldest, best known, most reliable and extensively used of all condition powders. It cures Chronic Cough, Heaves, Influenza, Distemper, Hide Bound, Indigestion, Constipation, and all Stomach Troubles. Restores lost appetite and increases assimilation. It assists in fattening and increases the quantity of milk and cream. Guaranteed to give satisfaction. Try a package and you will keep one on hand all the time. Price 25 cents.

DAVID E. FOUTZ CO., Baltimore, Md.

THICK, SWOLLEN GLANDS

that make a horse Wheeze, have Thick Wind, or Choke-down, can be removed with

ABSORBINE

or any Bunch or Swelling caused by strain or inflammation. No blister, no hair gone, and horse kept at work. \$2.00 per bottle, delivered. Book 3-0 free.

ABSORBINE, JR., for mankind, \$1.00, delivered. Cures Goitre, Tumors, Varicose Veins, Hydrocephalus, & Bone tumor. Made only by

W. F. YOUNG, P. D. F., 109 Monmouth Street, Springfield, Mass.



MORE COTTON AT LESS COST. Cotton planters throughout the South are learning that it doesn't pay to use little "stocks" or "scooters." During the past few years they have thrown aside these flimsy implements and are now using Blount's "True Blue" Middle Breakers instead.

These "True Blue" Middle Breakers are light enough for one mule and strong enough for two. They are built of the best cast steel, with either steel or wood beams, and will plough lands when all other have failed. They can be used right through the season, from bedding the land to laying by the crop.

E. J. Mullens, of Lyons, Miss., says:

"I have used them for the past two years on my plantation. Bought fifty or more during that time. They have given me universal satisfaction. I haven't purchased a point or repair for them yet. I consider it the best plow I have ever seen put in the ground, and I am satisfied that I am raising more cotton to the acre since I have been using them, owing to the better preparation and cultivation of the land."

Henry F. Blount, of Evansville, Ind., manufacturer of Blount's "True Blue" Middle Breaker, will send you a free copy of his book, telling all about these splendid Middle Breakers and containing many letters from planters praising his great invention. Write him a postal card to-day.

INCUBATOR CATALOGUE FREE.

The Sure Hatch Incubator Co., Box 8, Fremont, Nebraska, or Box 8, Indianapolis, Ind., desires to get the name and address of every reader of the Southern Planter who is in any way interested in poultry raising. Their catalogue not only describes their famous incubators of all sizes, but tells how hundreds of their men and women customers have made good incomes from the use of the Sure Hatch Incubator. These incubators are made in sizes for the amateur up to those of a large capacity for the professional poultry raiser, and they are shipped direct to the purchaser from the factory at Fremont, the branch at Indianapolis, and from other warehouse points, insuring quick delivery at all times.

When you buy an incubator of the Sure Hatch Incubator Company, remember that the manufacturer pays the freight to your station; you get a five-years' guarantee, and you really have the machine on unlimited trial, because at any time if any part should be broken or the machine get out of order, the manufacturers stand behind you with their guarantee. Write to-day for the Sure Hatch catalogue and book of "Poultry Profits." Do this before you make any plans for buying an incubator.

You Can't Talk
it too strong. What?

Gombault's

Caustic Balsam

As a Liniment

For the Human Body

Springfield, O., Sept. 19, 1904.

Lawrence-Williams Co., Cleveland, O.—Lewis E. Evesleigh, Urban, R. F. D., a farmer, had a bad cancer on back of his hand. When I first saw it he was on his way to have his hand amputated. I persuaded him to first try GOMBALUT'S CAUSTIC BALSAM, which he did, and on second application could rest well at night—the first for weeks. In less than three months he was at work on the farm. He will certify to this statement over his signature. Then Mr. Jenkins, storekeeper and postmaster at Seth, O., had a bad cancer on his cheek-bone. I saw him at a grange meeting, and told him to use CAUSTIC BALSAM twice a day, rubbing it in for five or ten minutes. In three months it was healed over, and is now all sound. These two are all that I have the address of just now. I have had CAUSTIC BALSAM used on old skin sores. One man had walked with crutches for more than a year, and several pieces of bone had come out. I persuaded him to try CAUSTIC BALSAM, and today you would not know he was ever lame. Then, it is a sure cure for piles, using it with sweet oil. I could tell of dozens of cases where I have induced different ones to use CAUSTIC BALSAM. I have been the means of more than fifty bottles being bought, because I know just what it will do. You can't talk it up strong enough. I wish you success.

R. L. HOLMAN,

In charge Co-operative Work of Ohio State Grange.

Price \$1.50 per bottle. Sold by druggists, or sent by us express prepaid. Write for booklet H.

The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

Fistula and POLL EVIL

Any person, however inexperienced, can readily cure either disease with

Fleming's

Fistula and Poll Evil Cure

even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Pocket

Veterinary Adviser.

Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durably bound, indexed and illustrated.

FLEMING BROS., Chemists,
280 Union Stock Yards, Chicago, Ill.

Tuttle's Elixir

Greatest maker of sound horses in the world. Tested many years, never fails if cure be possible. \$100 reward if it does. For lameness, curb splint, spavin, ringbone, swellings, etc.

Tuttle's Family Elixir

liniment for household use. Ask for Tuttle's American Worm and Condition Powders and Hoof Ointment. "Veterinary Experience," perfect horseman's guide free. Symptoms and treatment for all common ailments. Write for it. Postage 2c.

TUTTLE'S ELIXIR CO., 75 Beverly St., Boston, Mass.

Beware of all blisters; only temporary relief, if any.



**THE FOOD
TO FEED
TO FORCE
THE EARLY BROILER**

"RARVA" MEAT MEAL.

85 per cent. Protein, 7 per cent. Fat. Economic, Pure, Appetizing and Wholesome.

WILL KEEP INDEFINITELY. Write for booklet and sample.

SACK, 100 POUNDS, \$3.00.

RICHMOND ABATTOIR,
Dep. M. Richmond, Va.

No More Blind Horses For Specific Ophthalmia Moon Blindness and other sore eyes, Barry Co., Iowa City, Ia., have a cure.

HEAVES CURED! A remedy for lung, throat and wind troubles. Cures Heaves, Coughs, Distemper and Indigestion. Veterinarians use and recommend

PRUSSIAN HEAVE POWDERS
Druggists will get them. Price 50c at dealer, 60c by mail. Send for free book.

PRUSSIAN REMEDY CO., ST. PAUL, MINN.

\$6 UP. These Incubators
The New Standard Brooders \$3.75 up

Strong, well made. Simple, practical and successful. Fully warranted. Complete Catalogue sent free.

New Standard Incubator Co., Box 80, Ligonier, Indiana.

Hatch Chickens by Steam
with the
EXCELSIOR INCUBATOR
or WOODEN HEN

Economical and perfect hatching. Absolutely reliable and self-regulating. Thousands in use to-day.

GEO. H. STAHL, Quincy, Ill.

Send for free Catalogue.

MODEL MONEY MAKERS

Poultry is a profitable crop on farms where Model Incubators and Brooders are used. If you are not making big money on your chickens, write for my book. It tells how.

MODEL INCUBATOR CO., Chas. A. Cyphers, Pres., 359 Henry St., Buffalo, N.Y.

**PRairie STATE INCUBATORS.
UNIVERSAL HOVERS.**

New idea machines. Hatches the largest and most vigorous chicks. Guaranteed. Recommended, used and endorsed by the Government Stations. Send for convincing fact circulars.

VIRGINIA POULTRY SUPPLY CO.,
Box 359, Richmond, Va.
POULTRY SUPPLY DEALERS.

Please mention The Southern Planter.

PRIZE WINNERS AT VIRGINIA POULTRY SHOW, RICHMOND, VA., JANUARY 9-15, 1908.

Blue Andalusians.—A. B. Carter, Matoax, Va., fourth prize cockerel, first and fourth prize pullet.

Light Brahmas.—W. M. Carroll, Lynchburg, Va., first prize cockerel, first prize pullet.

Buckeye Reds.—Mrs. C. M. Robinson, Sabot, Va., first prize pen (four hens and one cock).

Black Cochin.—W. M. Carroll, Lynchburg, Va., first prize cock; first, second and fourth prize hens, and first prize hen.

Pit Games.—J. M. Conrad, Richmond, first prize cock; first prize hen; first prize cockerel; first and second prize pullet.

Frizzles.—L. R. Walton, Petersburg, first and second prize pullet.

Black Breasted Red Games.—B. J. Pleasants, Ashland, Va., first prize cock; first and second prize hens; first prize cockerel; first and second prize pullet.

Red Pyle Games.—B. J. Pleasants, Ashland, Va., first prize cockerel; first and second prize pullet.

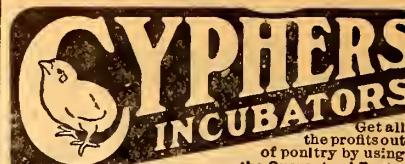
Cornish Indian Games.—Robert B. Fraser, Portsmouth, Va., first prize pullets; second prize cockerels.

Black Langshans.—A. M. Black, Tazewell, Va., first prize cock; first and fourth prize hen; first, second and fourth prize cockerel; first, third and fourth prize pullet, second pen. John C. Adams, Bristol, Va., second prize cock; second and third prize hen; third prize cockerel; second prize pullet, and first prize hen, first pen. J. S. Wenger, Dayton, Va., fifth cockerel; fifth pullet, third pen.

White Orpingtons.—F. S. Bullington, Richmond, Va., first and third prize cock; first and third prize hens; first, second and third prize cockerels; first, second and third prize pullets. Miss C. L. Smith, Croxton, Va., second prize cock and second prize hen.

Buff Orpington.—B. S. Horne, Keswick, Va., first prize cock; first, second, third and fourth prize hens, first prize cockerel; third and fourth prize pullets, and first prize pen. A. B. Carter, Matoax, Va., first and second prize pullets.

Barred Plymouth Rocks.—Leslie H. McCue, Afton, Va., first and third prize cock; first and third prize hen, and first prize pen. Burke's Garden Cattle Co., Burke's Garden, Va., second prize cock; third prize pen. C. L. Pettit, Manchester, Va., fourth prize cock. Sysonby Gardens, Petersburg, Va., fifth prize cock; fifth prize pen. J. Wallace Snellings, Manchester, Va., second prize hen; first and fifth prize pullet. Robert S. Gray, Richmond, fourth prize hen. L. E. Meyers, Richmond, fifth prize hen. Charlie Brown, Cartersville, Va., first, third, fourth and fifth prize cockerel; second and third prize pullets and second and



Get all the profits out of poultry by using the **Guaranteed Best Cyphers Incubators and Brooders.**

The Highest Standard for Poultrymen
Beginners, Experts and Agricultural Experiment Stations use and recommend Cyphers labor-saving, patented, self-ventilating, self-regulating machines. Our

Free 212-Page Book Tells Why
Write for this most practical, illustrated, big, free catalog, which will show you how to succeed best with poultry raising and How to Make Money with Poultry and Incubators. Address nearest office, **CYPHERS INCUBATOR CO.** Buffalo, New York, Boston, Chicago, Kansas City, Oakland, Cal., London, Eng.

**MANDY LEE
INCUBATORS
AND
BROODERS**

Are the only kind that will give results in every condition of climate and altitude. Endorsed by poultry raisers everywhere. The handsomest, best built and most satisfactory machines on the market to-day.

See the machines or write for catalogue and circulars.

THE IMPLEMENT CO.,
1302 East Main Street,
Richmond, Va.

-INCUBATORS-

Buy from the man that knows. I am not a manufacturer. I am a poultry breeder. I am Southern selling agent for one of the best Incubators and Brooders on the market. Medium in price. Guaranteed for five years. Write me for catalogue and further information.

CAL HUSSELMAN,
R. F. D. 1, Highland Springs, Va.

-BROODERS-

Incubator Whys

Our new book telling Whys and Wherefores of Poultry Profits—Why Ertel machines make most for their owners; how hatches are uniformly over ninety per cent with our machines; how we pay freight and why our prices are lowest—will be sent you free.

You owe it to yourself to learn the vast difference in results between Ertel Incubators and others. Please say whether interested in large machines or a small outfit.

GEORGE ERTEL CO., QUINCY, ILL.

You Haven't Got The Lowest Prices Until You Get Mine

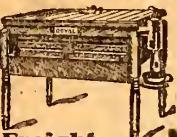
I quote you the lowest prices on the best Incubators and Brooders. I know how to build them.

IDEAL Hot-Air and Hot-Water INCUBATORS and BROODERS are made to give best results. Send for my handsomely illustrated free book, "Poultry for Profit." Read my trial offer. See how I protect you. **J. W. MILLER COMPANY, Box 312 FREEPORT, ILL.**



This 230-Egg Incubator

\$13.50



We Pay the Freight

This is a special proposition on our No. 3 Breeder's Favorite. We prepay freight to all points east of the Mississippi River. You get our regular \$18 incubator of best \$22 value in the world, in this Royal Incubator.

30 Days' Free Trial—guaranteed every way. Automatic control of heat and ventilation. Perfect hatches assured. Money back if not satisfied. Cut this out—mail with \$13.50—we'll ship promptly. Get the best at freight-mail bargain prices. Free catalog of incubators, brooders, poultry and all supplies. Booklet, "Proper Care and Feeding of Chicks," 10 cents. 60¢ poultry paper one year, 10 cents.

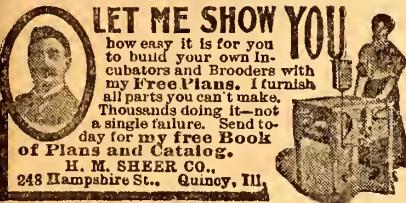
Royal Incubator Co., Drawer 218, Des Moines, Ia.

Famous Invincible Hatchers

From \$4.00 Up



The safe way to buy an incubator is on a Real Free Trial. Invincible Hatchers are sold that way and results guaranteed. Brooders, Poultry Houses and supplies all at very low prices. 224-page book Free. Write to-day to the United Factories Co., Dept. 16, Cleveland, O.



Barred Plymouth Rocks, Rhode Island Reds, Brown Leghorns, Mammoth Pekin Ducks.

Eggs at 75c. per 15; \$4 per 100; Duck Eggs, \$1 per 15; R. I. Red Eggs, \$1 per 15; Buff Cochin Bantam Eggs, 5c. each. Few nice Leghorn and R. I. Red Cockerels, \$1 to \$2 each.

JOSHUA COOPER, Surry, Va.

BARRED

Plymouth Rock

Pullets and Yearling Hens, bred from trap-nested stock, for sale at reasonable prices. Eggs in hatching season.

R. S. SHOWALTER, Dale Enterprise, Va.

Cockerels at head of flock from hen A-26, laid 266 eggs, Sire B-14 from hen A-21, laid 271 eggs per year.

"RINGLET"

BARRED PLYMOUTH ROCKS.

EXCLUSIVELY.

E. B. Thompson's celebrated strain. Bred for high quality, not quantity. My winnings at Virginia Poultry Association Show, Richmond, prove it. I won 1st and 3rd prize Cock, 1st and 3rd prize Hen, and 1st prize Pen. Unexcelled in laying qualities, size, vigor and beauty. Grand yards mated for 1908 EGG season. They will produce results that will please you. Eggs \$2 for 15. Some nice breeding Cockerels for \$2 and \$5 each. Good breeding Pullets \$1. Send for 1908 mating list. Satisfaction guaranteed. Address LESLIE H. McCUE, Box 4, Afton, Va.

Member Virginia Poultry Association and American Plymouth Rock Club.

fourth prize pen. Moorewood Poultry Farm, Wiseville, Va., second prize cockerel; fourth prize pullet.

White Plymouth Rock.—R. W. Haw, Manchester, first and second prize cocks; first and third prize hens; fourth and fifth prize cockerels, and second and fourth prize pen. Burke's Garden Cattle Co., Burke's Garden, Va., second prize hen; first prize cockerel; first, second and fourth prize pullets, and first prize hen. L. O. and C. O. Pusey, Richmond, second prize cockerels; third prize pullet, and third prize pen. Sysonby Gardens, Petersburg, Va., third prize cockerels, and fifth prize pen. H. B. Atkinson, Richmond, first prize pullet.

Buff Plymouth Rock.—Sysonby Gardens, Petersburg, first prize cockerel; first prize pullet, and first prize pen.

Rose Comb Rhode Island Reds.—J. A. Page, Richmond, first prize cock, and second prize pen. W. A. Shook, McGeheysville, Va., second prize cock; second and fifth prize cockerel. B. L. Woodward, Richmond, first prize cockerel; second prize pullet. W. F. Gaines, Richmond, third and fourth prize cockerel; fifth prize pullet. W. D. Sydnor, Barton Heights, first, third and fourth prize pullet; first prize pen.

Single Comb Rhode Island Reds.—Ellerson Poultry Yards, Ellerson, Va., first prize cock; second prize cockerel. J. J. Jones, Chestnut Hill, second prize cock; first and second prize pullet. F. S. Bullington, Richmond, third and fourth prize cock; first, second, third and fourth prize hens; first prize cockerel; first prize pen; third and fourth prize pullets. B. L. Woodson, Richmond, third and fourth prize cockerels.

Black Wyandottes.—W. J. Pepper, Richmond, first and second prize cockerels.

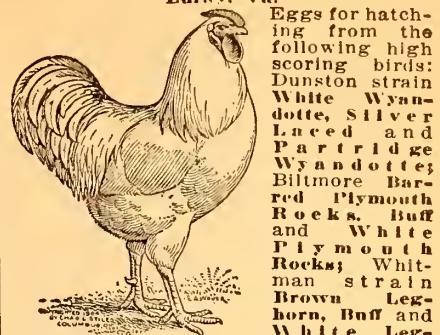
Silver Laced Wyandottes.—James V. Pomroy, Graham, N. Y., first prize cock; first and second prize hen; first prize cockerel; second prize pen. Otho M. Cockes, Elberon, Va., second prize cock; third prize hen; second prize cockerel; fourth prize pullet. Ellerson Poultry Yards, Ellerson, Va., third prize cock; fourth and fifth prize hens; third prize cockerel; first, second, third and fourth prize pullets; first and third prize hens.

Buff Wyandottes.—Geo. W. Osterhout, Bedford City, Va., first and third prize cockerel; first, second, fourth and fifth prize pullets; first prize pen. Moorewood Poultry Farm, Wiseville, Va., second prize cockerel; third prize pullet.

Partridge Wyandottes.—Ellerson Poultry Yards, Ellerson, Va., first and second prize cocks; first, second, third and fourth prize hens; third prize cockerel; first, second, third and fourth prize pullets; first prize pen. B. L. Woodward, Richmond, first and second prize cockerels.

EDGEHILL POULTRY FARM,

C. H. DICKINSON, PROP.,
Luray, Va.



Eggs for hatching from the following high scoring birds: Dunston strain White Wyandotte, Silver Laced and Partridge Wyandotte; Biltmore Barred Plymouth Rocks, Buff and White Plymouth Rocks; Whitman strain Brown Leghorn, Buff and White Leghorn, Cornish

Indian Game, Buff Orpington, Lt. C. R. I. Reds; Northup strain Black Minorca. Price, \$1 for 15. Special prices for large quantities. A few choice trios for sale. Cockerels, \$1 to \$1.25; Pullets, \$1. Satisfaction guaranteed.

Barred Plymouth Rock

Cockerels and Pullets; Eggs, \$1 per setting, \$1.50 for two; M. B. Turkeys; Toms and Hens; White Holland Toms; Eggs of both breeds, \$3 per 12; Pekin Drakes and Ducks; Eggs, \$1 per setting, or \$1.50 for two; B. B. Game Bantams; Barred Rock and Pekin Duck Eggs, \$5 per 100.

See December issue about Berkshires. Your interest to write me before buying.

E. F. SOMMERS, Somerset, Va.

BARRED ROCK EGGS.

At the Virginia State Fair, 1907, in a class of 93, my Rocks won 3rd Ck., 3rd Ck., and 2nd pen. At the recent show at Richmond in a class of 70, they won 1st., 3rd., 4th., and 5th Ck.; 2nd and 3rd Pullet, 2nd and 4th pen. I am now booking orders for Eggs from choice matings. Let me have your orders. I guarantee to please you. A few choice Cockerels yet.

CHARLIE BROWN,
Route 1, Cartersville, Va.

Valley Farm

BARRED
PLYMOUTH ROCKS,
SINGLE COMB
BROWN LEGHORNS.
Choice stock for sale.
CHARLES C. WINE,
Mt. Sidney, Va.

Barred Plymouth Rock

Eggs for Hatching from Choice 2-year-old Hens, descended from 230-Egg Trap-Nest Record Stock, mated to Park's April-hatched Cockerels. Price \$1 per 15; \$5 per 100. No better bred-to-lay B. P. Rocks in this country.

FRED. B. JONES, Gloucester, Va.

BARRED PLYMOUTH ROCKS.

Fine large fowls, correct in plumage, crossed with prize-winners of Thompson and Bradley strain. Cockerels, \$1.50 to \$2. Yearling Hens, \$1.50; 10-Months Pullets, \$1.25; Eggs, \$1, per setting, \$1.50 per two.

Imperial Pekin Ducks—Drakes, \$1.50; Ducks, \$1.25. Eggs, \$1 per setting; \$1.50 for two.

Mammoth Bronze Turkeys, National Strain, unusually fine this year; beautiful plumage. Eggs, \$3.25 per dozen. Orders filled promptly.

Mrs. R. E. WILHOIT, Somerset, Va.



**SINGLE COMB
BROWN LEGHORNS.
STRAWBERRY HILL
POULTRY YARDS,**

Box 287, Richmond, Va.

I. Davenport Williams, Prop. and Supt.

Mem. Am. Leghorn Club,
Mem. Am. S. C. B. Leghorn Club,
Mem. Va. Poultry Asso.

At Richmond, January 9-15 (Judge, Wittman), 1st Cockerel, 1st, 2nd, 3rd and 4th Pullet; 8 specials, including 2 silver cups for best display in class offered by Am. S. C. B. Leghorn Club and Virginia breeders. At Jamestown, 4th pen, 6th Cockerel on immature birds. Also highest awards Va. State Fair and Richmond, 1906. EGGS from exhibition matings, both pullet and cockerel line, \$3 per 15, \$5 for 30, \$7 for 50, \$10 for 75, \$12 for 100. From utility matings, \$1 per 15, \$6 for 100. Two-thirds hatch guaranteed or number of eggs duplicated at half price. Stock for sale at all times.

**SINGLE COMB
WHITE
BROWN LEGHORNS**

Strong, healthy, farm-raised stock, bred for layers as well as the showroom. My birds won at Virginia State Fair, Richmond, 1906-7, and Virginia Poultry Association, Richmond, 1908.

Eggs from my best pens of both breeds, \$1.50 per 15 or \$7 per 100. Choice Cockerels from \$1.50 to \$5 each; Yearling Hens and Pullets, \$1.50 to \$3 each. Prompt attention to all orders.

J. A. ELLETT, BEAVER DAM, VA.

SELLING OUT

S. C. B. LEGHORN

Pullets at 75 cents, and BUFF PLYMOUTH ROCK Pullets at \$1.

WHITE HOLLAND TURKEY Toms at \$3.

PEKIN DUCKS at \$1.25.

PEKIN DRAKES at \$1.50.

**LAUREL HILL POULTRY FARM,
Roxbury, Va.**

EGGS FOR SALE

From Pure-Bred Brown S. C. Leghorns and S. C. Rhode Island Reds, Prize-Winners, at Hagerstown, Frederick, Rockville, and Washington Poultry Shows. I can also furnish Eggs from Fine Pens of Barred Plymouth Rocks and Black Javas. Write to-day for prices, and address

J. M. HEAGY, Rockville, Md.

S. C. Brown Leghorns

AND

Barred Plymouth Rocks

For sale—A fine lot of Leghorn Cockerels for pullet breeding; also Pullets and Year-Old Hens. A few B. Rock Pullets and Hens for sale.

**RIVER VIEW POULTRY YARDS,
Mrs. C. M. Bass, Proprietor, Rice Depot,
Virginia.**

SPRING BROOK POULTRY FARM,

Culpeper, Va., H. H. Scott, Prop. Breeder of Northup strain Black Minorcas, Whitman strain of Brown Leghorns, and the best Silver-Laced Wyandottes. Have been breeding Black Minorcas six years, always with the best type in view. Stock and Eggs in season at very moderate prices, considering the quality. Write me for prices and full particulars.

Silver Penciled Wyandottes.—Otho M. Cockes, Elberon, Va., first prize cockerel; first prize hen.

Pekin Ducks.—H. Skipwith, Richmond, first, second, third and fifth prize pairs. Burke's Garden Cattle Co., Burke's Garden, Va., fourth prize pair.

Colored Muscovy Ducks.—Mrs. S. Y. Gilliam, Church Road, Va., first prize pairs.

White Muscovy Ducks.—R. Randolph Taylor, Beaver Dam, Va., first prize old pair; first prize young pair.

White China Geese.—J. F. Dunston, Lorraine, Va., first prize pair.

Single Comb Brown Leghorns.—H. M. Wilkerson, Richmond, Va., first prize cock; second prize cockerel. Dandridge Merrill, Lynchburg, Va., second prize cock; third prize cockerel. A. J. Warren, Richmond, first, third, fourth, fifth and sixth prize hens; first prize pen. L. E. Meyers, Richmond, second prize hen; fourth prize cockerels; fifth prize pullets. Strawberry Hill Poultry Yards, Richmond, first prize cockerel; first, second, third, fourth prize pullets. W. J. Todd, Richmond, sixth and seventh prize pullets.

Single Comb White Leghorns.—J. Wallace Snelling, Manchester, first and fifth prize cock; sixth prize hen; fourth prize cockerel; second and fourth prize pullets; second prize pen. S. S. Stansbury, Richmond, second prize cock; first and third prize cockerel; first prize pullet; fifth prize hen; first prize pen. H. A. Sager, Herndon, Va., third prize cock. J. A. Ellett, Beaver Dam, Va., fourth prize cock; fifth prize pen. A. J. Warren, Richmond, Va., first, second, third and fourth prize hens; fifth prize cockerel; third prize pen. B. H. Grundy & Son, Richmond, second, sixth and seventh prize cockerel; third and sixth prize pullet; fourth prize pen. A. F. Berger & Son, Richmond, fifth prize cockerel.

Single Comb Buff Leghorns.—First and second hen; first and second cockerel; first, second, third and fourth pullet; first pen to J. N. Coffman, Edinburg, Va.

Bronze Turkeys.—Charlie Brown, Cartersville, Va., first prize pair, old; first prize pair, young. Burke's Garden Cattle Co., Burke's Garden, Va., second Tom; second hen, young.

White Holland Turkeys.—J. F. Dunston, Lorraine, Va., first prize pair, old. R. Randolph Taylor, Beaver Dam, Va., second prize pair, old; second prize pair, young. Mrs. S. Y. Gilliam, Church Road, Va., first prize pair, young; third pair old.

White Wyandottes.—Walton D. Saunders, Richmond, first prize cock; second prize hen; second prize pen. C. E. Hawkins, Lynchburg, Va., second and fourth prize cock; fifth prize pullet; fifth prize pen. A. F. Berger, Richmond, third prize cock; first, third and fourth prize hen; fifth prize cockerel; fifth prize pullet; third prize

Eggs For Hatching

S. C. B. LEGHORN EGGS.

\$1. for 15, \$6 per 10, \$50 per 1,000.

S. C. W. LEGHORN EGGS.

\$1.50 for 15, \$8 per 100.

S. C. BUFF ORPINGTON EGGS.

\$2 for 15, \$10 per 100.

One Young White Holland Turkey Tom for sale at \$3.50 if taken at once. We are booking orders now for White Holland Turkey Eggs for March and April delivery—\$2.50 for 10.

We guarantee safe delivery, full count, fertile eggs from pure stock. Every male on the farm is new blood and not akin to the females. We ship from Richmond, Va.

**THE HUSSLEMANS,
Route 1, Highland Springs, Va.**

**REIDERS FINE
Poultry Catalogue**

for 1908 is larger and better than ever. Tells all about pure-bred poultry and illustrates 60 varieties. Contains 100 beautiful chromos of leading breeds—pretty enough to frame. Tell's of Best Louse Killer, how to cure diseases, make money. Only 10c postage. Send to-day for a copy.

E. H. REIDERS, Khecun, Pa.

BARRED PLYMOUTH ROCKS

(Hawkins Strain)

S. C. White Leghorns (Wyckoff strain), S. C. Brown Leghorns (Biltmore strain), S. C. Buff Leghorns, Mammoth Bronze Turkeys, Mammoth Pekin Ducks. Stock and Eggs for sale. Satisfaction guaranteed.

**MARION POULTRY YARDS, Marion,
Virginia.**

EGGS FOR HATCHING.

S. C. Buff and White Orpingtons, 15 eggs for \$1.50; Buff and White Wyandottes and S. C. R. I. Reds, 15 eggs for \$1; M. B. Turkey Eggs, 10 for \$2.50; Angora Bucks, \$10 and up, registered or eligible.

C. C. RUSSELL, Route 2, Hagan, Va.

S. C. W. LEGHORNS.

WINNERS WHEREVER SHOWN.

4,048 Eggs from 40 Hens from December to July, 1907—7 months.

EGGS AND STOCK FOR SALE. The hen that lays is the hen that pays.

**W. R. TODD, 426 North Sixth Street,
Richmond, Va.**

**BARRED PLYMOUTH ROCKS,
BUFF WYANDOTTES,
SILVER GRAY DORKINGS**

At the Virginia State Fair there were 93 Rocks showed by 9 different parties, and we won 9 out of 12 places and special for the best Cockerel in the show.

In Dorkings, we won on every bird we showed. Did not show Buffs. Stock and Eggs for sale.

**J. S. YOUNG, 1110 Main Street,
Richmond, Va.**

EGGS FOR SALE

From Pure White Plymouth Rocks, \$1 per sitting of 15, and White Pekin Ducks, \$1 for 10.

Address MRS. L. B. WILLIAMS, R. F. D. 4, Louisa, Va.

-- FERN HILL POULTRY FARM --

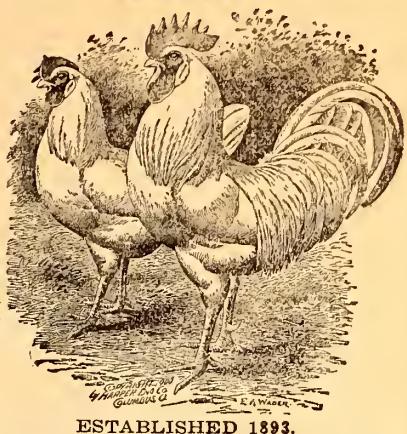
BREEDERS OF ARISTOCRATS ONLY.

BARRED PLYMOUTH ROCKS.
BLACK MINORCAS,
S. C. BROWN LEGHORNS
S. C. WHITE LEGHORNS.

For fifteen years I have bred these birds on my farm with free range. They have constitutions; are essentially aristocrat egg-shellers; have, and can, hold their own against the arrogant boast of any blue-ribbon winners. Have won prizes running from first to fourth, wherever shown. Highest scoring male, female and ten highest scoring fowls in the show. Never had better quality nor more vigorous utility. A few Cockerels of each variety at \$2.50 each, all strictly first-class birds. Shipped on approval.

EGGS \$1.50 PER SITTING.

Address J. WALLACE SNELLING, R. F. D. 1, MANCHESTER, VA.
(Yards, Stop 9, Richmond-Petersburg Trolley.)



ESTABLISHED 1893.

PRIZE WINNERS.

Our W. H. Turkeys, White Guineas and White China Geese won First at Virginia State Fair 1906 and 1907, and first at Virginia Poultry Show, 1908.

Our White Wyandottes won First and Second Cockerels, Second Pullet, and Third Hen, and First Pen at Virginia State Fair, 1907, and won First and Second Cockerels, First, Second and Third Pullets and First Pen, and also The Southern Planter Silver Cup, for best Cockerel in the American class at Virginia Poultry Association Show, Richmond, Va., 1908. We had only two Cockerels and Four Pullets in the show.

Our Pekin Ducks won First Virginia State Fair, 1906, and Second 1907. Eggs in season cheap from above breeds. No stock for sale, except Wild Mallard Ducks. **WHITE POULTRY YARDS, Lorraine, Va.**

Turkeys. Cockerels.

Prize winners wherever exhibited.

A few large, handsome Mammoth Bronze Turkeys for sale. Also extra fine birds in Cockerels and Pullets in White Wyandotte, White Orpington and Barred Rocks. Leading strains at reasonable prices. Eggs in season. Order now.

Miss C. L. SMITH,
Landor Poultry Yards,
Croxton, Caroline County, Va.

ELBERON POULTRY YARDS.

1 Yearling Mammoth Bronze Tom, \$8.
1 Young Mammoth Bronze Tom, \$5.
Silver-Laced Wyandotte Cocks and Cockerels.
Silver Penciled Wyandotte Cocks and Cockerels.

EGGS IN SEASON.

Won five premiums at Virginia State Fair, 1907; won on six entries 2 firsts, 2 seconds, 1 third, 1 fourth at Virginia P. A. Show, Richmond, January, 1908.

O. M. COCKES, Elberon, Va.



45 BREEDS BEST POULTRY

Fine book illustrates and tells all about poultry, feeding, care, diseases, our big premium offer. Low price for stock and eggs. Best way to rid poultry of lice, make money, etc., only 10¢.
JOHN E. HEATWOLE, Harrisonburg, Va.

Please mention The Southern Planter.

TURKEYS, POULTRY, BIRD DOGS.

4 well developed young **White Holland Gobblers**, ready to breed from; weigh 25 lbs., \$4 each. Twenty fancy **White Leghorn** Pullets, all laying, \$1.50 each. **Fancy Homer Pigeons**, \$1 pair.

One litter best **Pointer Pups** in Tennessee, ready for delivery in March. Write for description and prices. Orders booked now for **White Holland Turkey Eggs**, \$2.00 setting of nine. Bank reference. **J. B. WADDILL, Box 10, Tate Spring, Tennessee.**

Wilmont EGGS Wilmont

Tracy and Tompkins Strain of S. C. R. I. Reds at \$1.50 per 15. **Degraff** and **Shove** Strain of S. C. R. I. Reds, \$1 for 15; \$5 per 100. **Bradley** Strain of Barred Plymouth Rocks, \$1 for 15. A few Cockerels still for sale; also some S. C. W. Leghorn Cocks cheap. A 200-Egg Prairie State Incubator in good condition. A Niagara Hydraulic Ram No. 0, never been used, for sale. Satisfaction always guaranteed. **Mrs. F. E. WILLIAMS, Charlottesville, Va.**

EGGS FOR HATCHING.
ROSE-COMB BROWN LEGHORNS

Exclusively. From high scoring stock. Farm range, line bred. Great layers, \$1 per 15, \$5 per 100.

Prize pen, blue ribbed sire and dams, \$2 per 15.

Satisfaction guaranteed.
GARDNER POULTRY FARM, Ashburn, Va.

C. W. Gardner, Pres.; H. H. Gardner, Sec'y.

Member R. C. Brown Leghorn Club.

Prize Winning Stock

Mammoth Bronze Turkeys, Imperial Pekin Ducks, S. C. Buff Orpington and B. Plymouth Rocks. Fowls for breeding purposes. Satisfaction guaranteed or money refunded.

J. G. BUFORD, Dublin, Va.

JAMESTOWN WINNERS

Beautiful **Buff Orpington** Cockerels, \$3 each; Eggs, \$3 per 15. Also winners at leading shows.

Handsome Rose and Single Comb **R. I. Red** Cockerels, \$2 each; Eggs, \$2.50 per 15, \$8 per 100.

GEORGE W. SWEETING, Locust Mount Poultry Farm, Sharon, Harford County, Md.

Rose and Single Comb

RHODE ISLAND REDS



White Wyandottes,
B. P. Rocks,
Some R. C. R. I. Red
Cockerels for sale at \$2
each.

Pure-bred stock and
good fresh eggs, packed
in crated boxes, at \$1.25
per 15; \$2 per 30; \$3 per
50; \$5.50 per 100. R. C.
R. I. Red and White
Wyandotte Eggs by the
100 for Incubators on short notice.

VALLEY VIEW POULTRY YARDS,
J. G. Glick, Proprietor,
Box 41, Route 1, Dayton, Va.

SINGLE-COMB

RHODE ISLAND REDS.

Five years ago I purchased a \$50 Prize-Winning Trio from a noted egg-strain, with the intention of breeding the best Reds in the South. This strain has been so improved that my birds are now vastly superior to the trio. Buff Leghorns averaging over 200 eggs were discarded because the Reds were more profitable egg-producers. I believe I have the best fancy-utility strain on earth. It will pay you to investigate.

Big, Plump, Fertile Eggs, \$2 for 13.
Book orders early. A few wonderful Males and Choice Females to spare.

DR. J. H. C. WINSTON,
Hampden-Sidney, Virginia. . .

ROSE-COMB

Rhode Island Reds



Exclusively. Eggs from
prize winning stock. Out
of 15 eggs shipped to
Jacksonville, Fla., last
March, 12 hatched.

Member R. I. Red Club.

Miss Louise V. Spencer,
Blackstone, Va.

EGGS FOR HATCHING

FROM BUSINESS BIRDS.
ROSE COMB R. I. REDS.

Four Pullets sold from my flock last
fall averaged 27 eggs each in a period
of 44 days. Price, 15 for \$1, 50 for \$3.
100 for \$5.

J. O. Barksdale, Red Hill, Va.

Rhode Island Reds

"Both Combs." Stock and Eggs at re-
duced rates, and must be sold. Satisfaction
guaranteed at

ELKTON POULTRY FARM, Clinton Hens-
ley, Proprietor, Elkton, Va.

S. C. RHODE ISLAND REDS

DeGraff and Drisko Strain.

Choice Cockerels from \$1 to \$3 each,
also several Cocks, fine birds, at
reasonable prices. Well-Mated Trios,
good foundation stock, for \$5.
Eggs from prize winners, \$1.50 per
15. Special mating, \$2 per 15.

A. S. HARRISON, Herndon, Va.

Always mention The Southern
Please Mention the Southern Planter.

Brown Leghorn Club ribbons to Strawberry Hill Poultry Farm; American Black Minorca ribbon, J. Wallace Snelling, Manchester; Buff Orpington ribbon, B. S. Horne, Keswick, Va.; American White Orpington ribbon, F. S. Bullington, Richmond.

Virginia Show Ribbons.

The Virginia Poultry Association
ribbons for the best displays were
awarded as follows:

Barred Plymouth Rocks, Leslie Mc-
Cue, Afton, Va.; best display White
Plymouth Rocks, R. W. Haw, Man-
chester; Buff Plymouth Rocks, Syson-
by Gardens, Petersburg, Va.; White
Wyandottes, J. F. Dunston, Lorraine,
Va.; Columbian Wyandottes, H. D.
Brisner, Manchester; Buff Wyandottes,
George W. Osterhout, Bedford
City, Va.; best display Rhode Island
Reds, F. S. Bullington, Richmond;
Rose Comb Rhode Island Reds, W. D.
Sydnor, Barton Heights; Buff Orpingtons,
B. S. Horne, Keswick, Va.; White
Orpingtons, F. S. Bullington,
Richmond; Black Langshan, A. M.
Black, Tazewell, Va.; Black Minorcas,
J. W. Snelling, Manchester; Single
Comb White Leghorns, S. S. Stans-
bury, Richmond; Single Comb Brown
Leghorns, Strawberry Hill Poultry
Yards; best display Pekin Ducks,
Hugh Skipwith, Richmond; Geese, J.
F. Dunston, Lorraine, Va.; Turkeys,
Charlie Brown, Cartersville Va.

Pigeons.

Pigeons, White Homers.—George T
Hogg, first prize cock; Spies and
Nichol, second and third prize cock,
and fifth prize hen; Charles E. Register,
Richmond, fourth prize cock;
first prize hen; Montgomery and Gan,
fifth prize cock, second prize hen.

Blue Homers.—Montgomery and
Gan, first, second and third prize
cock, first and third prize hen; George
T. Hogg, fourth and fifth prize cock;
second and fourth prize hens; Spies
and Nichol, fifth prize hen.

Blue Checked Homers.—Montgomery
and Gan, first, fourth and fifth
prize cock, second and fifth prize hen;
George T. Hogg, second prize cock;
Spies and Nichol, third prize cock,
fourth and fifth prize hens; George T.
Hogg, first prize hen.

Other Color Homers.—Montgomery
and Gan, first prize cock; first prize
hen.

Black Homers.—Montgomery and
Gan, first, second and third prize cock,
first, second and third prize hen.

Red Checked Homers.—Montgomery
and Gan, first, third and fourth prize
cock, second, third and fifth prize hen;
Spies and Nichol, second prize cock,
fourth prize hen; George T. Hogg,
first prize hen.

Silver Homers.—Montgomery and
Gan, first and second prize hen.

Drum Homers.—Montgomery and
Gan, first and second prize hen.

J. C. Lester, Richmond, all prizes in
Almond, Tumblers, Swallows, Black
Jacobins and Buff Tumblers, first

S. C. RHODE ISLAND REDS.

I offer Chickens and
Eggs from the best prize
winning strains at prices
far below the cost of
original stock, so as to
bring these birds, une-
qualed for beauty, size
and laying qualities,
within reach of all.
Cockerels and Pullets at
\$1 to \$3 each and Eggs
at \$2 for 15.
I guarantee all to be pure bred.

ROBERT G. HUNDLEY,
Box 118, Farmville, Va.

Rhode Island Reds

ROSE COMB

Large, handsome fowls; splendid
layers. Chicks grow fast and are
unexcelled for the table.

PURE-BRED EGGS \$1 PER 15.
E. YOUNGLOVE, SCOTLAND, VA.

S. C. RHODE ISLAND RED

AND

BARRED PLYMOUTH ROCK

Cockerels from \$1 to \$1.50 each; M. B.
Turkeys, Toms \$4, Hens \$3.

C. L. BLANTON, McDuff, Va.

PURE-BRED R. C.

RHODE ISLAND REDS

Eggs at farmers' prices.
Special rates for Incu-
bator Eggs.

Miss LIZZIE G. SMITH,
R. F. D., Wellville, Va.

ROSE COMB

RHODE ISLAND RED

Eggs for sale at \$1 per sitting of 15.
No other chickens raised on the farm.

Mrs. JOSEPH M. HURT, Blackstone, Va.

200 Egg Strain

R. C. Rhode Island Reds

Bred by us; 50 fine Cockerels. Eggs
for hatching in season.

THE VALLEY POULTRY FARM,
Route 1, Maurertown, Va.

De Witt Poultry Farm

G. E. GUVERNATOR, Prop.
Phone 806, Highland Park, Richmond.
Eggs from all my prize-winning pens
Virginia.

now for sale.

60 Varieties.

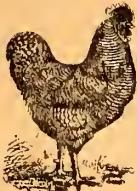
EGGS, EGGS, EGGS.

If you are interested in Barred P.
Rocks, Buff Wyandottes, Rose Comb
R. I. Reds, Golden Wyndottes, S. C.
White Leghorns, Silver Wyandottes,
Mammoth Bronze Turkeys, write to me
before placing your order for Eggs or
Fowls. Catalogue free.

ALTA VISTA POULTRY FARM,
Mrs. R. B. Fray, Prop.,
Advance Mills, Va.

Please mention The Southern Planter.

SYSONBY GARDENS, PETERSBURG, VA. EGGS FOR HATCHING.



From A. C. Hawkins' Royal Blue Strain, Barred Plymouth Rocks.
Bradley and Fishel Strain, White and Buff Plymouth Rocks.
Wyckoff Strain, Single-Comb White Leghorns—heavy layers.

\$1.50 TO \$2 PER SITTING.

Our Buff Plymouth Rocks took premiums at Virginia Poultry Show, Richmond, 1908, as follows: First Pen, first Cockerel, first Pullet.
Young Chicks, just hatched, 15 to 25 cents. Shipped anywhere.



SYSONBY GARDENS, Inc., Sam McFwen, Mgr., Petersburg, Va.

TAYLOR'S

WHITE WYANDOTTES.

Bred from Prize-Winning Stock.
Small late hatched Pullets at 75 cents each.
Larger late hatched Pullets at 90 cents each.

EGGS IN SEASON.

Also White Holland Turkey Eggs from winners at Jamestown, Virginia State Fair, and Virginia Poultry Association.

White Muscovy Duck Eggs from first prize winners at Jamestown, Virginia State Fair and Virginia Poultry Association.

Write for prices. Correspondence a pleasure.

HICKORY BOTTOM POULTRY FARM,
R. Randolph Taylor, Negrofoot, Va.
R. F. D. No. 2, Beaver Dam, Va.

OUR WINNINGS

AT THE VIRGINIA STATE FAIR, Richmond, Va., October 7-12, 1907, were First pen S. L. Wyandottes. First pen Partridge Wyandottes. First pen S. C. Rhode Island Reds. (The only three pens we showed.)

Virginia Poultry Show, Richmond, Jan., 1908, we won 26 Ribbons with 29 birds of above breeds and Silver Cup for best Display, American Class.

Write for particulars.
EGGS FOR HATCHING.

ELLERSON POULTRY YARDS,
J. W. QUARLES, Prop., Ellerson, Va.

FREE RANGE

WHITE WYANDOTTES

Exclusively. The yellow leg, blocky kind, heavy laying strain. Stock and Eggs at reasonable prices.

Also Pure-Bred Poland-Chinc Pigs.

DUNNLOA POULTRY FARM,
N. B. Peebles & Bro., Props., Carson, Va.

PLEASANT VIEW FARM.

WHITE BRAHMAS

One of the largest and best laying table fowl I have ever seen. Eggs \$1 per 12.

Mrs. THOMAS DUTTON Selden, Va.

S. C. BLACK MINORCAS

For sale. Cockerel, \$1.50 and \$2 each; trios, \$3.50 and \$4. For further information apply to

A. C. THROCKMORTON, Rapidan, Va.

prize cock, first prize hen, Black Tumblers.

Leslie A. Tucker, all prizes in Black Pied Pouters, Blue Wing Turbits, Black Tumblers, second prize cock, second prize hen; second prize cock, second prize hen, Black Jacobins.

Squab Breeders.—H. A. Craigie, Richmond, first, second, third and fourth prize cock and hen.

Prof. A. S. Greever, Burke's Garden, Va., had the misfortune to have a trio of White Wyandottes miscarried by the express company, and they reached the Show after the judging. They were, however, placed on exhibition and pronounced by all, Judge Wittman included, as superb specimens and would undoubtedly have had to be reckoned with had they been in the competition.

CALENDARS FOR 1908.

The International Harvester Co., of Chicago, sends us a beautiful set of calendars, six in number. Each of its harvester, McCormick, Plano, Deering, Milwaukee, Osborne, Champion, is represented. This company has supplied its agents throughout the land with a goodly supply and in order to secure one, just call on the agent of your favorite machine and he will cheerfully give you one.

Frank M. Laughlin & Co., Insurance Agents, Mutual Building, Richmond, Va., issue a splendid calendar suitable for your store or office. You can read the figures the distance of a city block.

Coe-Mortimer Co., Fertilizer Materials, Charleston, S. C., simply excel themselves with their large wall calendar copied from a celebrated painting entitled the "Grand Canal of Venice." This is a work of art and is doubtless in great demand.

J. W. Ferguson & Son, Printers, Richmond, Va., have a nice calendar which is always in demand. Sundays and holidays are printed in red and the moon's phases are shown.

Dupage Co., Ill., Dec. 24, 1907.

I think The Southern Planter is the best and cleanest farm paper I ever read. W. A. BOYNTON.

Poplar Hill

Poultry Farm.

Dr. H. H. LEE, Prop., R. F. D. 4, Lexington, Va.

S. L. WYANDOTTES

Eggs for hatching from high scoring birds, \$1 per 15. A few choice trios for sale. Cockerels, \$1.25 to \$1.50 each; Pullets, \$1.25 each. Reduction on large number. Satisfaction guaranteed.

PURE-BRED

Silver Laced Wyandottes

PULLETS AND COCKERELS FOR SALE AT \$1 EACH.

These are early hatched, choice birds.

John M. Harshaw, Collettsville, N. C.



S. and R. C. R. I. Reds, White Wyandottes, S. C. B. Leghorns and B. P. Rocks. Eggs for hatching \$1 for 15; \$1.75 for 30; \$2.75 for 60; \$5 for 100. All breeding stock mated; S. and R. C. Red stock. **RIVERSIDE POULTRY FARMS,** J. B. Coffman & Sons, Props., Dayton, Va.

THE

WHITE HOLLAND TURKEY MAN.

G. W. MOSS, GUINEY, VA. Eggs as follows: White Holland Turkey, \$2 per dozen, \$15 per 100; White Plymouth Rocks and S. C. W. Leghorns, 75 cents per 15, \$3.50 per 100; Pekin Ducks, \$1 per dozen.

MAMMOTH BRONZE TURKEYS, BARRED PLYMOUTH ROCKS. PEKIN DUCKS.

We have the best lot we have ever bred and from the most noted winning strains. A number of show birds for sale.

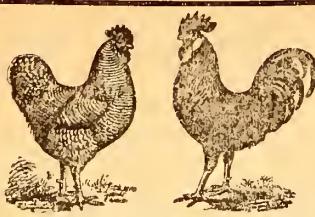
LESLIE D. KLINE, Vaucluse, Va.

GOLDEN BRONZE TURKEYS from prize-taking stock, for sale. Toms, \$5; Hens, \$4.

Mrs. S. F. BADGETT, Route 1, Farmville, Va.

MAMMOTH BRONZE TURKEYS, Choice birds; several White and Barred Rock Cockerels.

A. L. BLAIR, Howardsville, Va. Wanted: Rose Comb Brown Leghorns.



MAMMOTH BRONZE TURKEYS. WHITE HOLLAND TURKEYS

Choice Toms, 15 to 22 pounds in weight, \$5 to \$6 each.

Choice Yearling Toms, 25 to 35 pounds, at \$7.50 each.

Few Yearlings and Two-Year-Old Hens at \$5 each.

Fine lot of Young Hens of both breeds, 11 to 15 pounds, according to breed, at \$4 each. Special prices on Toms where two or more are taken.

Eggs of both breeds in season at \$4 per dozen.

PURE-BRED CHICKENS.

I have 22 White-Faced Black Spanish Hens and Pullets and 2 Cockerels, Greider's strain, and a choice lot. Will sell the 24 birds for \$30, or half of the lot for \$18, or single birds \$1.50 each except male birds, which are \$2.50 each.

I have choice Cockerels, also Hens and Pullets, of the following breeds at \$2 each and upwards, and special prices on Hens and Pullets in lots of six or more of a breed: White and Buff Orpingtons; Barred, Buff and White Plymouth Rocks; White, Buff and Brown Leghorns; White, Silver and Golden Wyandottes; Single and Rose-Comb Rhode Island Reds; Rose and Single-Comb Black Minorca, Light Brahmas and Silver Spangled Hamburgs. Better order at once and get advantage of best birds and lowest prices.

EGGS FOR HATCHING

At \$1.50 to \$2 per 15 or \$8 and \$10 per 100.

Pekin and Rouen Ducks at \$3 each for best Drakes and \$2.50 each for very good Drakes. Female birds, \$2 to \$2.50 each. Eggs for hatching, \$2 per 15 or \$5 for 50. Special prices in lots of 100 to 500.

Pure-Bred Hogs and Sheep.

Choice Poland-China, Berkshire and Chester White Pigs, 2, 3 and 4 months old; Young Service Boars and Bred Sows, 150 to 200 pounds. I have some extra fine Poland-China and Berkshire Sows bred for March and April farrow, weight 200 pounds and over, and will sell selected specimens for \$30 each, and they are as fine as they grow and all eligible to registry.

I have some September Yorkshire Shoats at \$13.50 each, and Young Yorkshire Sows, bred, for \$25 each. Orders being now booked for Tamworth Spring Pigs.

In Pure-Bred Sheep I have some choice coming two-year old Shropshire and Southdown Rams at \$30 each, and now is the time to buy, as you get the wool clip, worth several dollars, and save \$5 to \$10 in price.

Fine 160-pound Shropshire Bred Ewes at \$28 each and good 130-pound Ewes, \$25 each. All Sheep registered at the prices named. Farmers, do not delay, but send your order to-day. It will pay you to improve your stock.

Address JAMES M. HOBBS,
No. 1521 Mount Royal Avenue,
Baltimore, Md.

HINTS BY MAY MANTON.

THIS month we discard the Martha Dean and resume the May Manton pattern service. Our price is the same, 10 cents.

The need for a pretty, tasteful and becoming breakfast jacket always exists, and each new one is, therefore, certain of its welcome. Here is a very charming model that is tucked after a most satisfactory manner, that has the roll-over collar which is so comfortable and the three-quarter sleeves that are best of all for garments of the sort. In the illustration it is shown made of dotted challis and held by a ribbon belt, but cashmere, veiling, all similar light weight materials,



5871 Breakfast Jacket, 32 to 42 bust. the pretty India silks and the inexpensive wash fabrics that many women like at all seasons of the year, are appropriate.

The jacket is made with fronts and back. The back is tucked from the neck to the waist line and the fronts to yoke depth only. Hems finish the front edges and the turn-over collar is attached to the neck. The sleeves are of moderate and graceful fulness and are finished with turn-over cuffs

The quantity of material required for the medium size is 3 7-8 yards 21 or 24, 3 1-4 yards 32 or 2 1-8 yards 44 inches wide.

The pattern 5871 is cut in sizes for a 32, 34, 36, 38, 40 and 42 inch waist measure.

The skirt that is laid in plaits at the seams is the one that is quite sure to give graceful lines to the figure and here is a skirt that is just sufficiently full for freedom and grace, and which is stitched flat over the hips while it flares at the lower edge. In the illustration the material is one of the

BUFF ORPINGTONS

THE BEST ALL PURPOSE FOWLS KNOWN.



Pens No. 1—Fancy Orpingtons that win. Eggs, 15 for.....\$5.00

Pens No. 2—High Class Breeders. Eggs, 15 for.....\$2.00

Pens No. 3—Pure-Bred utility stock. Eggs, 15 for.....\$1.00

THE ETHERMORE FRUIT AND S. C. BUFF ORPINGTON FARM,

Henry J. and Chas. G. Sanger, Props. Dale Enterprise, Va.

Mention this paper when writing.

Glenview Orpingtons.

BUFFS EXCLUSIVELY.

A few Cockerels for sale. Not quite good enough for the show room, but just right to head a good breeding pen.

B. S. HORNE, Keswick, Va.

KISLING'S

S. C. WHITE LEGHORNS.

Bred to win and lay, and do it. At Dallastown, Pa., made 4 entries, won 1st. Pul., 2nd Ckl., 2nd, 3rd Hens. Bel Air, 11 entries, won 1st Ckl., 2nd Cock, 1st, 2nd Hens, 1st, 2nd, 3rd Pullets, 1st, 3rd Pens, 6 special, 2 silver cups. Birds score 93 to 95. Eggs \$1 per 15. Catalogue free.

Norman L. Kisling, Box G-22, Bel Air, Md.

BRONZE TURKEYS

FOR SALE, VERY FINE. I. B. FERGUSON STRAIN.

G. W. MORRIS, Route 2, Trevillian, Va.

Black Langshans

Eggs for Sale from Prize-Winning Stock.

A Few Good Cockerels Left.

JOHN C. ADAMS,
Bristol, Virginia-Tennessee.

STILL ON TOP!

BLACK'S

BLACK LANGSHANS.

are again winners, carrying off all the blues, special ribbons and a handsome sweepstakes cup at Virginia State Poultry Show. See complete list of winnings elsewhere in this issue. For Langshans of quality—either stock or eggs—write to



A. M. BLACK,
Tazewell, Va.

STONEWALL JACKSON 4995.

Probably the handsomest specimen of the Morgan family in existence. An old picture of Godolphin Arabian, to whom all Morgan horses trace through Justin Morgan, is a striking likeness of him, in pose, conformation and especially of a peculiar crest, ear and hind leg and abnormal distance from eye to ear. This stallion is naturally gaited also has the straight trot of the harness horse. Will make the season of 1908 at BUFFALO STOCK FARM, Greene County. For pedigree, terms, keep of mares, etc., address

E. T. EARLY, AMICUS, VA.
Not responsible for accidents.

Capt. J. A. Early, Doylesville, Va., writes December 2, 1907: "I am in my 82nd year; have seen and raised many fine horses, but my son's colt by Stonewall Jackson is the finest in size and form I ever saw."

Bargains in Horses.

A splendid pair of Mare Mule Colts, coming 2 years old. Extra fine; large as ordinary 3 year old; drives nicely to a buggy or light wagon. Will be sold at a bargain.

One 7-year-old Dark Bay Mare, 18 hands; weight about 1,000; compact and easy to keep. A reliable worker everywhere and a capital Brood Mare.

One splendid 2-year-old Sorrel Gelding; drives nicely, single and double; very compactly built. Will make a splendid family or work horse.

These horses are perfectly sound and will be sold at a bargain to the quick purchaser.

W. M. WATKINS & SON,
Saxe, Charlotte County, Va.

CHANTILLY FARM

HIGGINBOTHAM BROS.

FAIRFAX, VIRGINIA.

BREEDERS OF GAITED SADDLE HORSES AND HUNTERS.

Hedgewood Stock Farm

For sale, two Pure-Bred Registered PERCHERON STALLION COLTS, 2 years old past; sound; good style; strong, flat bone; Brilliant strain.

THOMAS R. SMITH, Lincoln, Loudoun County, Va.

SPECIAL BARGAINS IN PURE-BRED PERCHERON AND BELGIAN

Stallions, Mares and Fillies. Between 30 and 40 head to select from. Imported and American bred.

C. A. ALEXANDER & CO., Harrisonburg, Augusta County, Va.

SHETLAND PONY STALLION.

Will sell exceptionally handsome Brown Colt, one year old. Eligible to registry; fine disposition; all ready to take his first lessons in harness.

DREAMLAND FARM, Alden, N. Y.

CHESTER WHITES

Best Hog on earth. Will have large crop of Fall Pigs. Send in your orders now. Satisfaction guaranteed.

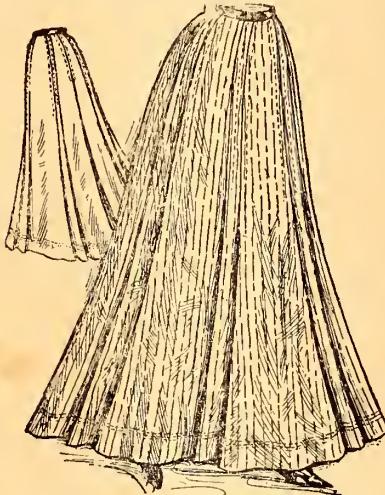
S. M. WISECARVER, Rustburg, Va.

Please mention The Southern Planter.

striped novelties stitched with belding silk but every skirting material is appropriate, for the model suits those of lighter weight as well as the heavier suiting and, as it can be made either in walking length or with a slight train, it is adapted both to the street and for indoor wear. The stitched finish is a favorite one of the season but banding can be applied if something more elaborate is liked.

The skirt is made in seven gores and is laid in two plaits at each seam and in inverted plaits at the center back.

The quantity of material required



5884 Seven Gored Skirt,
22 to 30 waist.

To Be Made In Round or Walking Length.

for the medium size is 9 1-2 yards 27, 5 1-4 yards 44 or 52 inches wide if material has figure or nap; 8 1-2 yards 27, 4 3-4 yards 44 or 4 yards 52 inches wide if material has neither figure nor nap.

The pattern 5884 is cut in sizes for a 22, 24, 26, 28 and 30 inch waist measure. These patterns will be mailed to any address by the Fashion Department of this paper on receipt of ten cents.

TO DESTROY SAN JOSE SCALE.

James Good, 959 Front Street, Philadelphia, is the original maker of Good's Caustic Potash Whale Oil Soap No. 3, which has a well established reputation as a destroyer of San Jose Scale and other parasites and insects that infest trees and plants. If you are in plant growth, write him and ask for his free booklet "A Pocket Manual of Plant Diseases."

Albemarle Co., Va., Dec. 26, 1907.

I have been reading The Southern Planter for three years and think it decidedly the best paper on the subject in the hands of the Virginia farmer. Dr. W. G. CHRISMAN.

ELLERSLIE FARM.**THOROUGHBRED HORSES**

AND

SHORTHORN CATTLE,

Pure Southdown Sheep and Berkshire Pigs for Sale.

R. J. HANCOCK & SON,
Charlottesville, Va.

KENTUCKY JACK FARM.

Is the wholesale house for Jacks, as we breed and raise the Big, Mammoth Kentucky Jacks, and can sell you first-class Jack 25 to 50 per cent. cheaper than a dealer or speculator can. Write to-day for prices on Jacks, Jennets and Mules. A large lot to select from.

JOE E. WRIGHT, Junction City, Ky.

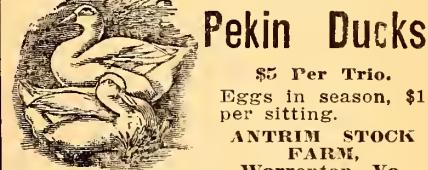
JACKS Imported Catalonia, Majorca and Kentucky Mammoth Jacks and Jennets, Saddle Horses, Trotting and Pacing Stallions, Poland-China and Tamworth Hogs. Our importation of Spanish Jacks, which arrived Aug. 12, is the largest and finest ever brought to the United States. Our herd of Tamworths is headed by the first and second prize boars at the Royal show in England. Our catalog is the finest ever issued by any Jack breeders. Write us your wants or visit our farms.

J. F. COOK & CO., LEXINGTON, KY.
Branch Barn, Greenville, Texas.

Half Blood Hound

Pups for sale. Bred from a full blooded man trailer and deer or fox hound, given up to make the finest for bear, deer or fox.

DIXON BROS., LEXINGTON, VA.

PURE-BRED**Pekin Ducks**

\$5 Per Trio.
Eggs in season, \$1 per sitting.

ANTRIM STOCK FARM,
Warrenton, Va.

BERKSHIRE PIGS.

Select Berkshire Pigs, \$5 each. No better blood on earth. Sire, "World's Chief," 101328; dam, "World's Queen," 101329 (not aakin).

May hatch M. B. Turkeys, mammoth in size, correct in plumage.

W. G. HUNDLEY, Dog and Chicken Fancier, Callands, Va.

Also Trained Mink and Rabbit Dogs for sale. Registered English Setters and Pointers.

FLYING FOX, 65456.

For Sale Cheap. Dropped February 2, 1903. Sire, Flying Fox 61441; Dam, Golden Lad's Brown Queen 162074, Grand Sire, Golden Sultan's Rosette 149740. Passed tuberculosis test October 30, 1907.

F. T. ENGLISH, Centerville, Md.

Tell the advertiser where you saw his advertisement.

REGISTERED

LARGE YORKSHIRE PIGS

Out of the very best imported sows (Hollywell). Also Bred Gilts.

PURE-BRED

S. C. BUFF OF PINGTONS

Eggs for hatching—15 for \$1.50; 50 for \$4.50; 100 for \$8. From select pens (Cook's)—No. 1, 15 for \$3; No. 2, 15 for \$2.50.

PRIVETS FOR SALE.

Riverside Park, Morganton, N. C.

IMPROVED

LARGE ENGLISH YORKSHIRE

Boar Pigs for sale at popular prices. Pure bred and registered. This breed is prolific, rapid growers and the males impress their good qualities wonderfully.

C. E. JONES, Caryshrook, Va.

STERLING HERD

REG DUROC-JERSEYS.

Boars ready for service. Will sell my herd boar, "Sterling," or exchange for sow or sow pigs.

R. W. WATSON, Petersburg, Va.

Three very fine Berkshire Boar Pigs ready for shipment.



Reg. P. Chinas, Berkshires, C. Whites, Large strains. All ages, mated, not akin. Bred Sows. Service Boars. Guernsey Calves, Collie and Beagle Pups and Poultry. Write for prices and free circular.

P. F. Hamilton, Cochranville, Chester County, Pa.

I amworth Pigs

From Registered Stock of Fine BREEDING.

VOLNEY OSBURN.

Bluemont, Loudoun Co., Va.

BERKSHIRES

To make room for coming crop of Spring Pigs, I am offering last summer's Boars and Gilts, soon be ready for service, from my Biltmore Sows, for the small sum of \$6 to \$8 each if taken at once.

B. E. WATSON, Stuart's Draft, Va.



BERKSHIRES

Young Sows, open or bred, and Boars ready for service. Pure-bred Berkshires at grade prices.

GLENMOORE FARM,
D. D. HUNT,
Charottesville, Va.

BEAGLE PUPS

FOR SALE.

JAMES R. PARKER,
CYPRESS CHAPEL, VA.

GOOD HOUSEKEEPING.

SMOKED BEEF.

This is a variety of the corned beef and will be found a pleasant change. Take a rib roast, or any piece you prefer, ten to fourteen pounds, make a dressing of one pint of salt, one cup of brown sugar, one cup of molasses, one tablespoon of saltpetre, one teaspoon of red pepper, and one teaspoon of black pepper. Rub this well into the beef and turn it over every day for ten days. Then drain off all the liquor and rub it well with bran and hang it up in a smoke of chips and sassafras roots for five days. When it is to be cooked soak it twelve hours and then boil it slowly for five hours. Let it get cold in the liquor, when it will be found juicy and delicious.

VEAL CHOPS.

Pound the chops gently until they are tender; then lay them in a pan and pour boiling water over them to just cover; cover the pan closely and let it simmer twenty minutes. When nearly done season with pepper and salt and a few drops of onion juice. Take them from the pan and dry with a soft cloth and butter generously; dip them in beaten egg, sift seasoned cracker crumbs over them and let them brown quickly inside the stove. Thicken the water in which they were cooked and add seasoning. Serve in gravy boat.

SALMON LOAF.

Take the salmon out of the cans and pick to pieces, removing all skin and bone; season with salt, pepper and lemon juice; mix in a small quantity of cold creamed potatoes and one raw egg to each can; form into a loaf and bake slowly. This is good either hot or cold.

BEWITCHED LIVER.

Take three pounds of calf's liver, chopped fine, one quarter of a pound of bacon, chopped, one cup of bread crumbs, two eggs well beaten, one teaspoon of horseradish, grated, two teaspoons of salt, a fourth of a teaspoon of red pepper, two teaspoons of black pepper, one medium sized onion, chopped very fine, one tablespoon of tomato catsup. Mix all these ingredient in a bowl and pack them into a close tin mould—a small tin bucket will do. Set it in a pot of cold water and let it come to a boil and keep it boiling hard for two hours or more; then take it out of the water and set the mould in a warm oven and let it stay at the same heat for forty minutes. Do not turn it out of the mould until it is perfectly cold. Slice in thin slices with a very sharp knife.

ROAST GOOSE.

If the weather is cold, your goose will be all the better for keeping five or six days, and it should on no account ever be cooked the day it is killed. Let it lie several hours before you are ready to put it on in weak salt water; this draws out the strong,

THE GOLDENROD BERKSHIRES.

Our herd is small in numbers, but is composed of fine individuals of the choicest breeding, tracing to champions at home and abroad. Pigs for sale. Prices reasonable. Only first-class individuals sold.

Dr. J. B. TUTTLE, Craigsville, Va.

BERKSHIRE offer some exceedingly choice BOARS. by Imported Danesfield Tailor, 76490 and out of Biltmore red sows. It will be hard to find better or cheaper stock

HENRY WARDEN, Fredericksburg, Va.

BERKSHIRES

For sale. Boars ready for service, a few selected Gilts, a choice lot of Pigs from which to select. Write me your wants and I'll tell you what I have. Satisfaction guaranteed.

E. LODGE ROSS, Glen Hilton Farm, Bedford City, Va.

SUNNYSIDE BERKSHIRES.

Best blood in America in my herd boars, Imported Hightide Commons, Baron Premier III.'s Bachelor, and Sunnyside Faithful. Sows just as good. Don't buy Berkshires until you know more about mine. Write for circular.

W. R. WALKER, UNION, S. C.

EDWARD WALTER

Breeder and Shipper

of Registered Chester White, Poland-China and Berkshire Pigs; Scotch Collie Dogs and a variety of Poultry. Send 2-cent stamp for circular and prices. Come, see my stock and select for yourself.

Eureka Stock Farm, West Chester, Pa.

DORSETS.

We have some of the best Ram Lambs that we have ever offered. Better order one before they are all sold. Can spare a few Young Ewes. J. E. Wing & Sons, Mechanicsburg, Ohio.

EDGEWOOD STOCK FARM

DORSETS.

Our fall lambs are now ready for you. Let us hear from you promptly this year.

J. D. ARBUCKLE & SONS,

Maxwelton, Greenbrier County,
West Virginia.

Fairfax Co., Va., Nov. 18, 1907.
I do not like to lose a copy of The Southern Planter.

F. A. SEYMOUR.

Willow Glen Farm

Reg. Short Horn Cattle.



My Short Horn Herd won more than 100 ribbons at seven fairs last fall (1907).

Eight Yearling Bulls for sale, several of them prize winners. All sired by my great show and breeding Bull, PRINCE ALBERT 206212.

Dr. D. M. KIPPS,
Front Royal, Va.

REDLANDS FARM

RED POLL CATTLE

2 splendid Young Registered Red Poll Bulls, beautiful conformation; exceptional animals; one very large.

1 RED POLL BULL Calf.

9 specially fine Pure-Bred Shropshire Buck Lambs.

2 Fine Registered Berkshire Sows.

Address Mr. Aaron Seay (Manager),
Carter's Bridge, Albemarle Co., Va.

Devon Herd Established 1884. Hampshire Down Flock Established 1880.

DEVON CATTLE

BULLS AND HEIFERS,
HAMPSHIRE DOWN SHEEP,
RAMS AND EWES.

ROBERT J. FARRER, Orange, Va.

Hereford Cattle

Several young, Pure-Bred Registered Bulls for sale at farmers' prices. Excellent strain and fine individuals. Also Grade Hereford Cows and Heifers.

WILLIAM C. STUBBS, Valley Front Farm, Sassafras, Gloucester Co., Va.

Breed up Your Stock.

Two extra fine Young ANGUS Bulls, eligible to registration; half dozen SOUTHDOWN Ram Lambs; a number of ESSEX Pigs for delivery January to March.

L. G. JONES, TOBACCOVILLE, N. C.

REGISTERED

Angus Heifers

IN CALF TO A
PRINCE ITO BULL.
YOUNG BULLS.

LARGE YORKSHIRE PIGS.
OVERBROOK FARM,

8 W. Conway St., Baltimore, Md.

Aberdeen-Angus Cattle

DUROC-JERSEY SWINE, SHROPSHIRE SHEEP.
N. B. UPP, R. F. D. 4, Greenfield, O.

goosy taste. Then plunge it into boiling water for five minutes. Fill it with dressing made with one part of creamed Irish potatoes, one part of stale bread crumbs, a tablespoon of butter, a slice of middling chopped fine, one small onion chopped fine, a small quantity of thyme and sage; grease the goose with butter; rub the inside with salt and celery seed; fill with the dressing, tie up the neck, and put it into your double roasting pan with water to the rack; dredge with flour and let it cook until tender. If the gravy is not thick enough, add a little browned flour when the goose has been taken out.

HORSERADISH SAUCE.

Grate one teacup of horseradish, (you may grind it in the meat chopper), one tablespoon of dry mustard, one tablespoon of sugar, four tablespoons of vinegar, two tablespoons of olive oil; this may be omitted and not missed; pepper and salt; one teaspoon of turmeric. You will find this a delightful relish with cold beef or any cold meat.

HOMEMADE MUSTARD.

Eight tablespoons of ground mustard, two tablespoons of sugar, two tablespoons of flour, two teaspoons of salt, two teaspoons of black pepper, one teaspoon of cloves and cinnamon, half and half; a saltspoon of cayenne, one full teaspoon of celery seed; mix with a little cold vinegar, then pour two cups of boiling vinegar over it and let it come to a boil. When it is cold add a small quantity of salad oil very slowly. This will keep and is very fine.

WHITE CAKE.

The whites of seven eggs, four goblets of flour, two goblets of sugar, one goblet of butter, one cup of milk, one teaspoon of soda, and two of cream tartar, season with bitter almond, and bake in three layers. Spread an icing between and sprinkle nuts on the layers.

SPONGE CAKE.

Twelve eggs, their weight in sugar, the weight of eight in flour, the juice of one lemon, beat the yolks until they are thick and creamy. Add the sugar and beat again until smooth, then add the flour and beat again, then the lemon juice and, lastly, fold in the whites with as little beating as possible. Bake in a loaf and it will be as fine as any you ever saw.

CARAVEN.

Nottoway Co., Va., Nov. 2, 1907.

I am an old reader of The Southern Planter and I find it a great help in farming. W. F. CULLITON.

Louisa Co., Va., Nov. 5, 1907.

Your valuable paper, The Southern Planter, adds much to the pleasure of my household.

F. T. ANDERSON.

HYGEIA HERD

Holstein-Friesians.

SONS OF

Pontiac Calypso's Son,

FOR SALE;

Dam—Pontiac Calypso, A. R. O., 28.43 pounds.

Sire's dam—Beryl Wayne, A. R. O., 27.87 pounds.

From following A. R. O. cows:

FRONTIER JESSIE VEEMAN,
A. R. O., 20.70 pounds;

SHADELAND DULCIBEL IV.,
A. R. O., 20.92 pounds;

MANOR GRACE PIETERJE,
A. R. O., 20.92 pounds;

NETHERLAND FANCY ROSETTA,
A. R. O., 20.53 pounds.

THE BULL IS HALF THE HERD—Get the Best

Prices and pedigrees sent on application.

Come at once and make your own selection or write us your wants.

Address: CROZET,
J. B. Loomis, Supt., Albemarle Co.,
Dr. W. F. Carter, Prop. Virginia.

AIRLIE FARM

H. C. GROOME, Proprietor.

Ayrshire Cattle

CHOICE OFFERINGS OF YOUNG
AND MATURE STOCK.

ADDRESS

Address AIRLIE FARM, Warrenton,
Virginia.

Fine ANGUS Calves AT FARMERS' PRICES.

Several splendid family Milk Cows, young, fresh and gentle.

Several 15-16 Grade Angus Bull Calves ready for service. Will make superb bulls for grading up herds.

Several Registered Angus Bull and Heifer Calves. Fine individuals, whose development has been pushed since the day they were dropped.

All these calves will be sold at farmers' prices. Write at once if you want one of them.

A splendid piece of standing Pine and Oak Timber, half mile from railroad, for sale cheap to a quick buyer.

W. M. WATKINS & SON,
Saxe, Charlotte County, Va.

WANT ADS.

Rate 2 cents per word. Cash with order. Initials and figures count as one word. 25 cents minimum charge.

POULTRY, ETC.

FERTILE EGGS FOR HATCHING— If you buy a sitting or a thousand eggs you get them from same pens we hatch ourselves from improved heavy laying strains of New York and New Jersey Single-Comb White Leghorn. Eggs \$7 per 100, \$1.50 per sitting; 15 White Plymouth Rocks—only one grade, the best—\$2 sitting, \$10 per 100. Incubator Chicks 15 and 20 cents each. Place orders early. Belport Poultry Farm, Box 15, Portsmouth, Va.

PURE-BRED WHITE WYANDOTTES for sale. Having recently bought Fall Creek Poultry Farm, will dispose of all poultry, consisting of over 600 White Wyandotte Pullets and Cockerels; all pure-bred and splendid healthy stock; Pullets, \$1; Cockerels, \$1.50. Also three Sure-Hatch Incubators and Brooders. John Kubovec, R. F. D. 1, Ashland, Va.

REDUCTION BARGAIN SALE, CHOICE Cockerels, last April hatch; 13 S. C. Black Minorcas and 3 White Wyandottes. Single birds, \$1.50; two or more, \$1.25 each. Also will trade comparatively new Champion Pony Reaper, cost \$60, for cow or calves of like value. H. B. Smith, Jr., Hanover, Va.

ON ACCOUNT OF MOVING MUST sell all breeding stock. White Holland Hens and Toms, \$2.25 and \$3.25; two pens White Leghorns (Wyckoff and Vandresser strains), pen of Silver Spangled Hamburgs, one of R. I. Reds. All Pullets and Yearling Hens, \$1 each. Write your wants. M. Allen Stickley, McDaniel, Md.

FOR SALE—BARRED ROCK COCK- erels, \$1.50, Mammoth Bronze Toms \$5, Mammoth Pekin Drakes, \$1.50, Hens \$1, Rouen Ducks \$1, Drakes \$1.50. The above are pure-bred birds. Satisfaction guaranteed. Address J. A. McCarty, Monroe Grove Poultry Farm, near Aldie, Va.

SINGLE AND ROSE-COMB BLACK Minorcas; 1908 winners; 11 entries; 11 prizes—six specials and four Rose-Comb Club ribbons. Eggs guaranteed to hatch, regardless of distance. Circular free. Edgar Crouch, Twining, D. C.

EGGS IN SEASON FROM R. C. Rhode Island Reds and White Wyandottes; also Cockerels for sale. R. C. Rhode Island Red Cock took first prize and Hens second at last State Fair. John Campbell, Route 2, Beaver Dam, Va.

PURE BRED FOWLS, EGGS, 85c. PER 15, Buff Orpington, White Wyandotte, S. C. Black Minorca and R. C. Brown Leghorn; Leghorn Cockerels, \$1. Mrs. Frank Johnson, Route No. 1, Louisa, Va.

MAMMOTH BRONZE TURKEYS— largest strains, largest herd, Toms \$5 and up; Eggs \$3 per 12; champion laying strains S. C. Brown Leghorns. Eggs \$2 per 15, \$3 per 30. Byrd Bros., Route 3, Salisbury, N. C.

CHOICE BROWN LEGHORN HENS and Cockerels for sale. Address Oscar P. Spivey, Bower's Hill, Va.

FOR SALE—WHITE, BROWN AND Buff Leghorns and White Wyandottes, or will exchange the White Leghorns for some other standard breed fowl. Catalogue for stamp. Clarence Shenk, Box S., Luray, Va.

FOR SALE—TWENTY S. C. BROWN Leghorn Hens, \$1 each; ten Pullets, 75 cents each. Order quick. "First come first served." Also nice lot of Berkshire Hogs, all ages. Evergreen Farms, Rice Depot, Va.

FOR SALE—BARGAINS IN BROWN Leghorn Breeding stock and R. I. Red Cockerels. Bred for eggs; Eggs in season. Tanglewood Poultry Farm, Bumpass, Va.

EGGS—WE ARE BOOKING ORDERS for future delivery; S. C. Brown Leghorn, Brace's strain; B. Plymouth Rocks, Bradley strain. River View Poultry Yards, Rice Depot, Va.

R. C. RHODE ISLAND RED EGGS, \$1 per 17, from heavy laying strain; Collie Pups at half price this month; brood females cheap. Shady Brook Farm, Route 2, Roanoke, Va.

BARRED PLYMOUTH ROCK COCK- erels for sale, \$1.50 and \$2; Pullets \$1 or \$1 per dozen; Eggs \$1.50 per 15, \$4 per 45 or \$8 per 100. A. J. S. Diehl, Port Republic, Va.

LEGHORNS, WHITE AND BROWN; Silver Spangled Hamburgs, Indian Runner Ducks. Quality unsurpassed; hardy. Stock and Eggs for sale. Fairfield Farm, Nokesville, Va.

FOR SALE—ONE PAIR PURE White Holland Turkeys for \$5; six Pure-Bred Leghorn Cockerels, 75 cents each. A. O. Mays, Fredericksburg, Va.

A FEW YOUNG BUFF PLYMOUTH Rock Cocks; standard bred. Vigorous. Improve any farmer's flock. \$1.50 each. John E. Morris, Jr., Orange, Va.

FOR SALE—EGGS FROM EXHIBI- TION Single Comb Rhode Island Reds and Black Langshans; a few choice Cockerels reasonable. J. T. Fulcher, Rural Retreat, Va.

PARTRIDGE WYANDOTTE EGGS from my Richmond, Va., and Bristol, Tenn., 1907 prize winners, \$2 per 15. D. W. Jardine, Staunton, Va.

FOR SALE—ARTICHOKEES, PEACH Blow Potatoes. Dollar Incubator, Peach Trees. B. H. Walker, Stevensville, Va.

SINGLE-COMB BROWN LEGHORNS— High Class Cockerels and Pullets, \$1 each, from the best strains extant. B. O. Poultry Yards, Rapidan, Va.

BUFF ORPINGTON (VASS & COCK Strain) Cockerels, \$1 a piece; Eggs, 75c. per setting; \$2 per 50. Mrs. E. P. Wood, Beaver Dam, Va.

WHITE WYANDOTTE EGGS FROM prize winning stock; special February price, 80 cents for 15. J. O. Woodward, Jonesville, Va.

FOR SALE—LARGE MUSCOVY Ducks; very hardy and most prolific variety; \$2.50 per pair. W. B. Coleman, Mannboro, Va.

BUFF ORPINGTON EGGS FOR SALE. 15 for \$1.50, 50 for \$4, 100 for \$8. For eggs from select pens see page 156, Riverside Park, Morganton, N. C.

PURE-BRED S. C. BROWN LEGHORN Hens, 75c. each. Archie Ellis, Waverly, Sussex county, Va.

BUFF PLYMOUTH ROCKS ARE WINTER Layers. Cockerels only \$1 each. Beauties. J. D. Thomas, Round Hill, Va.

WANTED—ONE PEACOCK AND ONE Peahen. Mrs. George M. West, Vinita, Va.

A FEW S. C. BROWN LEGHORN Cockerels for sale. \$1 each. Eggs in season. Miss Iola R. Bragg, Gordonsville, Va.

FOR SALE—PURE BRED MAMMOTH Bronze Turkeys. Toms, \$3; Hens, \$2.50. M. K. Trice, Buckner, Va.

EGGS FOR HATCHING, BUFF ORP- ingtons, \$1 per setting; White Leghorns, \$2 per setting. Rose Lawn, Box 56, R. F. D. No. 2, Richmond, Va.

BUFF ORPINGTONS, LARGE SIZE Solid Buff, strong and healthy. Eggs \$1 and \$2 per 13. W. A. Tanner, Bristol, Va.-Tenn.

FOR SALE—10 CHOICE S. C. WHITE Leghorn Cockerels, \$1 each. W. W. Morton, Cumberland, Va.

FOR SALE—PURE-BRED MAMMOTH Bronze Toms; pure-bred Berkshire Pigs. Mrs. George M. West, Vinita, Va.

LIVE STOCK.

FOR SALE—HAVING CLOSED OUT Capt. V. T. Hill's herd of Red Poll Cattle, registered and tuberculin tested, I am booking orders for some extra fine Bull Calves. This herd, in point of breeding and quality, is second to none. I am closing out my Jerseys and grades in calf to my Red Poll bull. I shall now breed Red Polls exclusively. W. B. Meares, Belvidere Farm, Linwood, N. C.

HOLSTEINS FOR SALE—TO AVOID inbreeding. I offer for sale to a quick buyer, the richly-bred bull, Netherland Clothilde Monk's Count, a very fine individual, as well as a richly-bred one; very quiet and kind. Also have a Bull Calf by him out of Maggie Clothilde, which I will sell at farmers' prices. Its dam is now giving six gallons a day. Born on October 1, 1907. William W. Jackson, Bizarre Dairy Farm, Farmville, Va.

GUERNSEYS—ROCK SPRING FARM offers for sale Calves of either sex of best milk producing strains; also the mature Bull, Golden Knight of Rosedale, sired by Coraletter Sow, second at St. Louis, and out of Primrosedale, A. R. 113. An exceptional opportunity to secure one of the very best animals in the East. H. T. Harrison, Rock Spring Farm, Leesburg, Va.

FOR SALE—AT A BARGAIN—BERK- shire Pigs of finest breeding; on hand now 4 sows and 3 boars, sired by Premier Rex, grandson of Premier Longfellow, dam of Premier Rex Imported Juliet F. B., out of Montview Belle, she by Manor Faithful 68312, dam Highcleville Lady, of Biltmore, 81573. Satisfaction guaranteed or money refunded. Oak Hill Stock Farm, Wenonda, Va.

FOR SALE—REGISTERED AYRSHIRE Bull, two years old, price \$45; 4 Durro-Jersey Sows, eligible to registry, \$15 each; 12 Angora Nannies, 2 Angora Bucks, \$10 each. Dr. William Crawford Johnson, Frederick, Md.

TRY LARGE YORKSHIRE HOGS— You will wish no better. W. E. Stickley, Strasburg, Va.

Live Stock (Continued).

WANTED TO EXCHANGE OR SELL Registered Aberdeen-Angus Bull, 6 years old. Very gentle and quiet, fine specimen; weighs about 1,500 lbs. when fat. Will exchange for same breed or Hereford. C. R. Sanderson, Ashby, Va.

FOR SALE CHEAP—AS WE SAID IN January Planter we have sold our farm, but have not sold all our fine Berkshire Hogs. Still selling at sacrifice price. Dalkeith Stock Farm, South Boston, Halifax County, Va., E. W. Armistead, Proprietor.

PURE ENGLISH AND LORD PREMIER strain of Berkshire Pigs of either sex for sale; Young Sows and Boars in service; also Jersey Cows. Visit or write for pedigrees and prices; no better and priced very reasonably. W. H. Warriner, Ruffin, N. C.

REGISTERED YORKSHIRE HOGS for sale—One Boar, 1½ years old; four Sows with litters of pigs, and 8-weeks-old Pigs. F. R. Ball, Dranesville, Va.

WANTED—FOUR GRADE PERCHERON Mares, sound and well broken, from 3 to 6 years old. Weight from 1,600 lbs. up. Address Frank Brand South Boston, Va.

PURE-BRED BERKSHIRE FIGS, Collie Puppies and Shorthorn Calves for sale at low prices. Thomas H. McGechin, Greenwood, Del.

REGISTERED DUROC SWINE; THE most prolific hog bred. Choice Pedigreed Pigs for sale at farmers' prices. Clarence Shenk, Luray, Va.

REGISTRED DURED DUROC-JERSEY Swine. The best of all Hogs. Prices low and pedigree sent with each pig or hog. Oscar G. Hutcherson, Union Hall, Va.

WANTED—HOLSTEINS OR DAIRY Cattle, pure-bred or grades; young, fresh and good milkers. Trowbridge & Daugherty, Chula, Va.

FOR SALE OR EXCHANGE FOR Jersey Heifers of equal breeding, Registered Galloway Bull, 3 years old, A. W. S. Mott, Dixondale, Va.

FOR SALE—ONE REGISTERED RED Polled Cow, 7 years old last month. Also two heifers. T. C. Morton, Rice Depot, Va.

FOR SALE—TO AVOID INBREEDING, Pure-Bred Poland-China Yearling Boar; sire and dam prize winners. Price moderate. E. L. Bailey, Ashland, Va.

FOR SALE—PURE-BRED SHORT-horns—three cows. Calf and 15-months Bull. N. Boush, Clarksville, Va.

BEFORE BUYING YOUR BERKSHIRE Pigs write me for my prices and breeding. It will pay you. Dr. Charles G. Cannaday, Roanoke, Va.

REGISTERED BERKSHIRES, BLUE ribbon quality. Write us your wants. Fairfield Farm, Nokesville, Va.

FOR SALE—OR WILL EXCHANGE for Good Work Horse, or anything I can use, 24 head young sheep. W. J. Olive, Madison, N. C.

REAL ESTATE.

CHEAP LANDS IN ARKANSAS, TEXAS, and New Mexico. Robert Hill, Des Arc, Ark.

FINE TIMBER FARM FOR SALE—Farm has 600 acres and 3,000,000 feet saw-mill pine timber. Only 3 miles from Southern Railway. 6-room dwelling, 3 tenement houses, and all necessary outhouses; 200 acres arable land, responsive soil; well watered. Schools and churches convenient. Healthy country. Very cheap. Terms reasonable. J. B. Thomas, Drewryville, Va.

FARM FOR SALE, ACCOUNT ENGAGEMENT in other business; three miles from Farmville (population 3,000); 260 acres, about 170 clear, rest in oak and pine; 5-room dwelling, all necessary outbuildings, all in good order; good well, good orchard. Will include all stock and machinery. Write for particulars. F., care Southern Planter.

WANTED—TO RENT OR WORK ON SHARES—Fine Farm on Dan river, close to fine market for milk, butter, etc., and all farm products. Good buildings, etc. Station on farm only a few hundred yards from dairy barn. A bargain for the right man. For particulars address Oak Hill Stock Farm, Wenonah, Va.

FOR RENT OR SALE, IN ALBEMARLE County, Virginia, country store; most excellent stand; splendid building and now doing a fine business. This is an unusual chance. Address R. M., care Southern Planter, Richmond, Va.

WANTED—TO TRADE STOCK OF A lumber and coal company in State of Washington for Virginia farm; par value stock \$5, trade on \$2.50 basis; trade up to 20,000 shares. Address Box 155, Fayette City, Pa.

POSITIONS—HELP.

DAIRY FARMER WANTS POSITION; accustomed to care of pure-bred cattle, improved dairy machinery, etc.; middle aged, single and sober; have had life time experience. Address Joseph Vandegrift, Hamilton, Loudoun County, Va.

YOUNG MAN WHO DESIRES TO learn business wants position with some one in the poultry business for next year. Address R. T. Conway, Holladay, Va.

WANTED POSITION AS FARM MANAGER by agricultural college graduate. Prefer a Virginia location on a stock and grain farm. Address "Manager," care Southern Planter.

WANTED—MARRIED WHITE MAN as working farm foreman. Address Box 196, Charlottesville, Va.

MISCELLANEOUS.

HAVE A BEAUTIFUL MIRA SWISS Music Box (new) with about 25 steel music records, costing \$75 cash; will exchange this for 60 pure-bred yearling S. C. White Leghorn Hens with good lay-over combs and long backs. Address Post-Office Box 15, Portsmouth, Va.

FOR SALE—ORCHARD GRASS SEED, grown in Fauquier County, Va.; acclimated; guaranteed free of ox-eye and first-class in every respect. Prices and samples gladly furnished on request. Address McGill & Son, The Plains, Va.

SEED CORN FOR SALE—"BOONE County White" for rich lots, "Hickory" King for thin uplands. Growth short and stocky. Ears low down. Best yield at Virginia Experiment Station. Price, \$1.35 per bushel. Dr. Walter Stuart, Farmville, Va.

CABBAGE PLANTS FOR SALE—About half a million fine Cabbage Plants for sale at \$1.50 per 1,000; lots of 5,000, \$1.25 per 1,000; 10,000, \$1 per 1,000; leading varieties. R. P. DuVernet, Sunnyside Truck Farm, Greenville, S. C.

EVERYBODY'S READING—40 per cent. discount. Everybody's Magazine, World's Work and Delineator, value \$5.50. Our price for all three, \$3.30. Morrisette Subscription Agency, Box 240 S. P., Richmond, Va.

FOR SALE—ONE 25 H. P. CENTER-CRANK Engine. Will take a 15 H. P. in part payment. Alfred L. Butler, Drewry's Bluff, Va.

WANTED—TO BUY ALL KINDS Wild Birds and Animals, particularly Tame Deer, Wild Turkeys, White Squirrels, Peafowl, Otters, Red Foxes, Grey Squirrels, Partridges, Pheasants, Beaver. State price when writing. Dr. Cecil French, Naturalist, Washington, D. C.

FOR SALE OR TRADE FOR LIVESTOCK or Agricultural Machinery, a thoroughbred Stallion, 8 years old, sound, fast, good size and a good looker. Percival Hicks, North, Mathews county, Va.

FREE—A VALUABLE BOOK, for shooters, 144 pages, prepaid if you write for our catalogs: Guns, Revolvers and Rifle Sights. Morrisette Arms Co., Box 240 S. P., Richmond, Va.

FOR SALE—ONE COX COTTON Planter, little used, \$4.50. Two H. M. Smith Straw Cutters, \$4 and \$4.50. One Gurley's Vernier Compass, 5-in needle, new, \$30. J. F. Hunter, Arcola, N. C.

FOR SALE—COMPLETE STENOGRAPHIC course with International Correspondence School; will sell cheap or exchange for poultry or any kind of stock. H. E. Bays, Bedford City, Va.

MORRISETTE'S MAIL ORDER HOUSE sells "everything." Order by mail—the only way we sell. Box 240 S. P., Richmond, Va.

FOR SALE—TWO MALE FOX OR Rabbit Hounds, 2 years old; both large; will take \$25 for both. C. P. Blanton, Cedon, Va.

FOR SALE—EARLY ROSE SECOND Crop Seed Potatoes, absolutely free from scab or blight. H. B. Cowles, Toano, Va.

FOR SALE OR TRADE, ONE SURE Hatch Incubator and Brooder, nearly new. Address M. Thayer, Jeffress, Va.

FOR SALE—ROAD MACHINERY OF every description. L. A. Arthur, Leesville, Va.

FREE FOR CHILDREN—"LITTLE Folks' Magazine" and beautiful postal, prepaid. Morrisette Subscription Agency, Box 240 S. P., Richmond, Va.

"East View"
SILVER LACED WYANDOTTES. Exclusively. Free range. Rob biddy for wooden hen. Eggs, \$1 for 15; \$3 for 50; \$5 for 100; \$7 for 150. Mrs. W. S. Chichester, Agnasco, Md.

Forsyth Co., N. C., Sept. 30, 1907.
As I am a farmer I cannot get along without The Southern Planter.



A large stock farmer of the Middle West recently remarked that he valued his evergreen windbreak at \$1,000, and that it had paid him dividends of from 20 per cent. to 30 per cent. per annum, for the past ten years, on this valuation. It did so by protecting his buildings and stock from the cold winter winds and saved him an immense amount of feed and fuel.

That the above facts are true is just beginning to be realized by many people and it is our prediction that there will be thousands of evergreen windbreaks planted all over the country during the next few years.

Evergreens are as easily grown as any of our common forest trees if a few simple rules are followed in planting and caring for them. If you will write at once to The Gardner Nursery Company, Drawer 105, Osage, Iowa, they will send you six sample evergreens two years old, entirely free of charge, and with them will send the plain rules for planting and after-care as referred to above. Mailing expense of the evergreens is 5 cents, which you can send or not, as you choose. A postal will bring the trees and also their fine catalogue, containing colored plates and a mine of valuable information for fruit-growers. Write to-day, to above address.

PECANS.

Our nurserymen friends, B. W. Stone & Co., Thomasville, Ga., would like to get in correspondence with such of our readers as are interested in Pecans. This Company has made a specialty of this nut for a number of years and have some very fine stock for sale at reasonable prices. In fact, you buy direct and save middleman's profit. Furthermore, the Company places at your service, without cost, its long experience in growing pecans, and you are invited to correspond with it on this subject. Look up the advertisement in this issue.

STRAWBERRY HILL POULTRY YARDS.

Attention is invited to the advertisement of these yards elsewhere in this issue. Single Comb Brown Leghorns of aristocratic breeding have long been their specialty. Show ring or utility stock of the prize-winning sort can always be had. Mr. Davenport Williams will answer all inquiries with pleasure.

GROVE FARM

Brooklandville, Maryland.
P. O. Lutherville, R. F. D.; Telephone and Telegraph, 42-K, Town.
The property of James McK. and I. B. Merryman.

GUERNSEYS

The kind that win. Not beaten in 1907. Shown Maryland State Fair, Allentown, Pa., Mt. Holly, N. J., Trenton, N. J., Richmond, Va., and Hagerstown, Md. When you buy get the best. A few pure-bred Heifers and Bull Calf dropped April 16 1907, out of Imp Lady Simon, by Milford Lassie II. Anchor the Bull that wins.

Our Berkshires were unbeaten wherever shown. Write for prices.

THOROUGHBRED

BERKSHIRE BOARS,
JERSEY BULL CALVES,
DORSET BUCK LAMBS.

Sire of Calves, FLYING FOX, 65456, son of Flying Fox who sold for \$7,500 at the Cooper sale, 1902. All stock in best condition and guaranteed as represented. F. T. ENGLISH, Centreville, Md.

WALNUT HILLS HERD

Reg. Angus Cattle

Yearlings and Calves for sale. J. P. THOMPSON, ORANGE, VA.

FOR SALE

JERSEY BULLS

BULL CALVES.

Tuberculin tested by U. S. Government.

Forest Home Farm, PURCELLVILLE, VIRGINIA.

JERSEYS and GUERNSEYS BERKSHIRE HOGS

FIRST-CLASS BRONZE GOBBLERS—LARGE SIZE.

BROWN CHINESE GEESE.

PEKIN DUCKS, MUSCOVY DUCKS.

M. B. ROWE & CO., Fredericksburg, Va.

Duroc-Jerseys Shorthorns Shropshires.

DUROC Gilts and Sows safe in pig, Young Boars and Service Boars for sale. Pigs from eight to twenty weeks old, representing the most famous blood lines and herds in America. Four great boars in service in our herd—Virginia Comodore, Quick's Orion, Chief of Shenandoah and Beat's Topnotcher. Write for Duroc Facts. We are selling these hogs at reasonable prices and under positive guarantees.

SHORTHORN Bull Calves by Imported Best of Archers, one of the great Scotch bulls, and an International winner.

SHROPSHIRE Rams of the best imported blood cheap, to close them out. We do not want to carry them over. We can spare a few good Ewes also.

LESLIE D. KLINE, VAUCLUSE, VA.

Stock for Sale.

One Registered Berkshire Boar, ready for service.

One Registered Berkshire Boar, ready for service.

S. C. Brown Leghorn Cockereis and Pullets, both fancy and utility stock.

RIVER VIEW FARM C. M. BASS, Prop., Rice Depot, Va.

\$3.50 PAIR FREE

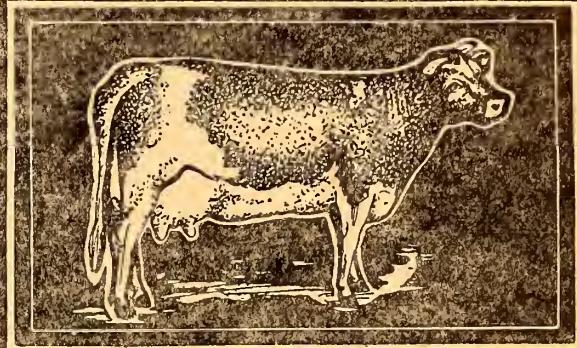
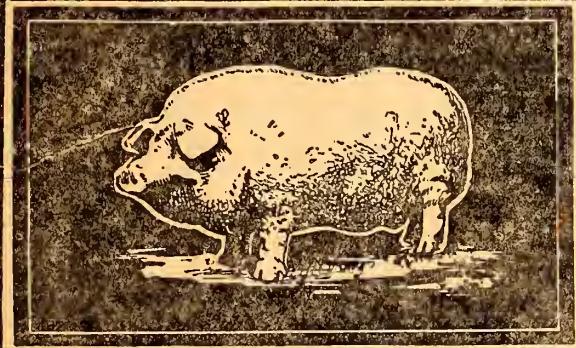
TO PROVE BEYOND ALL DOUBT TO EVERY INTELLIGENT STOCK OWNER THAT

WILBUR'S STOCK TONIC

IS THE WORLD'S GREATEST CONDITIONER AND FEED SAVER
**WE WILL ACTUALLY GIVE AWAY WHERE WE HAVE NO AGENT ONE FULL SIZED
25 POUND PAIL TO EVERY READER OF THIS PAPER WHO FILLS AND MAILED US**

THE COUPON

SHOWN BELOW.



Collinsville, Butler Co., Ohio, Jan. 4th 1906

Wilbur Stock Food Co., Milwaukee, Wis.

Gentlemen—Wilbur's Stock Food not only develops an animal, but at the same time insures health and protection against disease. As a test I put "King Edward II," in an infected lot where hogs had died of cholera and let him sleep in the same quarters, drink from the same troughs, with a sick hog with him and he not only kept well but never relapsed or died. I owe this to the timely use of Wilbur's Stock Food. As to the truth of my statement, I can refer you to responsible citizens of my neighborhood who have seen the hog feed. Sincerely yours, CARL G. FISHER.

Sincerely yours, CARL G. FISHER.

WHAT WILBUR'S STOCK TONIC IS

NEARLY a quarter of a century's actual experience has proven beyond all doubt that Wilbur's Tonic is a money-maker for feeders. WE KNOW THIS. It has been PROVEN to us thousands upon thousands of times in the most forceful manner. We want to convince YOU and we are willing to do it AT OUR OWN RISK.

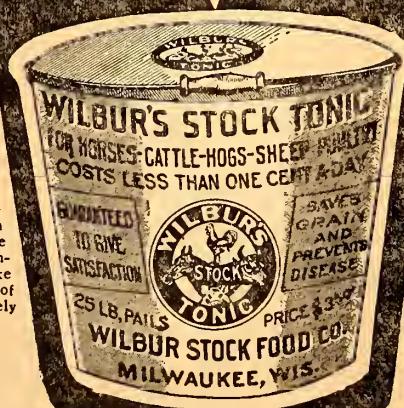
You know the value of pasture for any kind of stock; how it keeps the animals in good condition—nature's own way of doing it. There is no argument about the value of the pasture, but it does not last the year 'round. We prepare a tonic which mixed with grain and fed to stock, furnishes in stall or feed box in the proper proportions, the ingredients of pasture diet, invigorates and fattens stock at small enough cost to make the tonic a money-making investment for the owner of one cow, horse, hog or sheep, and a proportionately larger one for the owner of thousands of head.

FOR COWS

You know when the pasturage goes down in the fall the milk goes, the butter goes, the flavor goes, until all are shortest when the price is highest. Wilbur's Tonic invigorates cows; it supplies the needed roots, barks and leaves of the pasture, sustains the flow of milk and color, quantity and flavor of the butter. Take a cow right off the pasture, feed her Wilbur's Tonic in the stall and she will show very little loss of milk, and one cent's worth of Tonic per day saves one dollar's worth of grain per month.

FOR HOGS

Hogs, you know, are the most susceptible animals to contagious disease. But you know, too, if they escape contagion they are kept cheaper than any other stock. If you keep your hogs healthy they can resist contagion, will fatten quickly and cheaply. If they get sick and refuse to eat you know how quickly they will die. Nothing will save them; medicine is useless. To keep them healthy you must feed them something they will eat, and something that will satisfy the demands of their



OUR RESPONSIBILITY

Nearly a quarter of a century in successful business has given us a very enviable position in the business world. Any banker can tell you whether we are responsible, and the publishers of any large agricultural paper can tell you if we do as we agree. Further than this, we refer you to any bank or wholesale house in Milwaukee, or to R. G. Dun & Company, Bradstreet, or any other commercial agency, and the First National Bank of Milwaukee in particular.

particular.

**HOW TO WRITE THE NAME
OF A STOCK FARM**

Mr. Stock Food Co., 83
Main Street, New York, N. Y.
Please send
Fonic absolutely free.

Office.....
Answer this question:
I stock do you own?
Cattle
Horses.

Shenandoah, Iowa, Dec. 11, '07.
Editor Southern Planter,
Richmond, Va.

Dear Sir:—The December number of your magazine has just reached our table, and among more than one hundred agricultural publications that come to us, we want to congratulate you on the publication of one of the very best. In short, it is one that every reader, wherever he may be, will be benefited and profited by, and if every farmer and planter in Virginia, and the South, would peruse its columns each month and follow the information to be gained, it would not be long until the South would be one of the most prosperous portions of the United States or the world, for there are many advantages that portion holds over other less favored localities that would be more profitably utilized.

It is true, as we have personally observed, that the South is rapidly casting off the old ways and taking up the new. In brief, they are adopting diversified farming. It has been our observation of more than fifteen years that no country can keep pace with the times when they grow but one staple crop or product, and we are glad to see the South rapidly growing out of the notion that cotton is king. Yet, cotton is king; it's worse, it is a Czar and makes serfs of many a poor man who would otherwise be in affluent circumstances if he would take advantages of his surroundings and adopt a system of diversified farming.

Among other, and, as we regard it, one of the ablest and best articles in your December issue is that of Professor V. M. Shoesmith, Agronomist of Maryland Experiment Station, with regard to the selection of seed corn; also, another very able article by Professor Andrew M. Soule. While we have never had the pleasure of a personal acquaintance with either of the gentleman, we have been attracted to them, first, from their articles in various agricultural publications, and also through personal correspondence with them, and we want to advise every reader of your paper to read their articles closely, and we feel assured they will be profited by so doing. There are many suggestions we might offer along the same lines if time and space would permit, but you may hear from us again some time in the future.

Very truly yours,
RATEKIN'S SEED HOUSE,
J. W. Ratekin.

Giles Co., Va., Dec. 30, 1907.

I like The Southern Planter very much. I think it is the best of all the papers of its kind. I would not do without it for twice its cost.

C. S. DOUTHAT.

BILTMORE FARMS.

BILTMORE N. C.

Jerseys

A FEW CAREFULLY SELECTED YOUNG

Bulls and Heifers

At reasonable prices, representing rare combinations—Utility and Beauty—Milk and Butter on both sides as far back as they go—and the type that breeders are all after.

Berkshires

Representing combinations of Imported King Hunter on Western type of sows, and Premier boars on imported sows. Breeders need this kind of blood. Prices right.

Standard Poultry

Wyandottes, Leghorns and Rocks. For price lists, etc., address
BILTMORE FARMS, R. F. D. NO. 2, BILTMORE, N. C.

JERSEY CATTLE

The best herd in the world. Headed by two bulls that cost over \$10,000 each. BULLS AND HEIFERS for sale.

Also WHITE ORPINGTON FOWLS, the best general purpose breed; CORNISH INDIAN GAMES, the best table fowl; WHITE LEGHORNS, the world's greatest layers.

For particulars, address BOWMONT FARMS, Salem, Virginia.

THE HOLLINS HERD

—OF—

HIGH-CLASS HOLSTEIN-FRIESIANS.

Cows with Official Records of 21 pounds of butter in seven days. Cows with Official Records of 86 pounds (10 gallons) of milk in one day. Heifers that have milked over six gallons of milk in one day (with first calf).

A HERD that AVERAGED during last fiscal year almost 11,000 pounds of milk.

A son of the great Hengerveld DeKol, sire of 77 A. R. O. daughters in the herd.

SELECT STOCK FOR SALE.

Buff Orpington
Eggs, Cockerels and Pullets
for sale.

JOS. A. TURNER, General Manager,
Hollins Institute,
Hollins, Va.

LIVE STOCK AUCTIONEER.

I offer my services as a Stock Salesman to the breeders of the East. In doing so, I will say that I have equipped myself both by having taken a course at the Jones National School of Auctioneering, and by years of breeding and selling Pedigreed Stock. I make a specialty of Pedigreed Sales.

If I may be permitted to say it, I will suggest that I believe I can render Breeders better service than salesmen residing in remote parts of the country, as I am thoroughly familiar with conditions obtaining in this section. Then, too, I will probably not be quite as expensive as to railroad fare, etc., and besides, I must give satisfaction or I make no charge for my services.

Write me or 'phone me via Winchester over Southern Bell Phone for dates. Prompt attention assured.

Roy P. Duvall, : : : Stephenson, Va.

Mr. Edison Says:

"I want to see a Phonograph in every American Home."

The Phonograph is Mr. Edison's pet and hobby. Though he has patented hundred of wonderful inventions, the phonograph is regarded as one of his greatest achievements. Mr. Edison knows of the wonderful pleasure his instrument has provided, and is providing, in thousands of homes.

TRADE MARK

Thomas A Edison.

Latest Style Edison Standard WITH OUR PARLOR GRAND Equipment

Lots of Fun

With an Edison Phonograph

This wonderful instrument has been termed, and rightly, too, the "king of entertainers." There is absolutely no one old or young who is not amused and delighted by this greatest invention or the "WIZARD OF THE TWENTIETH CENTURY." As Mr. Edison has well said, no American home should be without a phonograph.

The latest perfected product of the great Edison factory, also our own splendid Parlor Grand equipment — new features — exclusive points of superiority!

See It—Hear It! Get this remarkable instrument in your own home — then you will see how far superior this is to the ordinary talking machine — far superior even to the fine Edison Machines you have heard heretofore.

FREE TRIAL

While This Offer Lasts every responsible person can get on *free trial* a genuine Edison Phonograph Outfit, including 12 genuine Edison gold-moulded records, direct from us to your home: *positively not a cent in advance — no deposit — no bother with C. O. D.* — no formality of any kind. *We allow forty-eight (48) hours' free trial at your home; and in rural districts up to a week if necessary for convenience of patrons.*

Try the instrument in your home, play the stirring waltzes, the two-steps, concert pieces, minstrel dialogs, old-fashioned hymns and other religious music, beautiful vocal solos, operatic airs and other beautiful Edison gold-moulded records. Play all these, and if *then* you do not care to keep this wonderful Edison outfit, send the instrument back *at our expense* — and we will charge you nothing for the trial.

\$2 a Month

Now Pays For a
Genuine Edison
Phonograph Outfit

Machine and one dozen genuine Edison gold-moulded records.—Less than \$1 a week for the finest outfit—with our Parlor Grand equipment added—and at *surprising* rock-bottom price without even interest on payments.

FOR CASH IN FULL.

So many cash purchasers are taking advantage of this opportunity to secure direct the finest Edison outfit that we are often asked what discount we can allow for cash. We are obliged again to say that we can give no cash discount, as we have allowed the lowest possible price to those who buy on time and we must treat all Edison customers alike.

This Easy-Payment Offer places a genuine Edison Phonograph within reach of every one. *We charge only the lowest net cash prices without interest on monthly payments.*

You should see and hear

the finest Edison Outfit—which is recognized as the best phonograph outfit in the world. We illustrate here the regular outfit, but the special circular we will send you illustrates also our new special standard outfit with our special Parlor Grand equipment and the large hand decorated Parlor Grand Floral Horn. We will send you this magnificent circular free with our Edison catalog.

**Better write
at once.**

SIGN Your Name and Address



Sign and Mail this coupon now

F. K. BABSON,
Edison Phonograph Distributer
Edison Building,
Suite 3202
Chicago, Ill.

TRADE MARK
Thomas A Edison.

— CUT OUT THE COUPON —
F. K. BABSON, EDISON PHONOGRAPH DISTRIBUTER,
Edison Building, Suite 3202 Chicago, Ill.
Without any obligation on me, please send at once my new style outfit, to me free, prepaid. Edison record catalog and
catalog, full explanation of the free trial easy payment offer.

Name.....
Address.....
You'd rather you may
Send a letter or a
coupon with the
letter.

TWO MENSAHIBS (LADIES) IN

INDIA.

"Traveller."
No. II.

From the South of India we travelled up the western coast to Bombay, the journey requiring two nights and a day. We arrived at five in the morning and drove up in the early dawn to the Taj-Mahal Hotel, and it was a great relief to find one so excellent after our long journey. No one could desire better than the Taj-Mahal—built on the water, and equipped with every modern convenience, and provided with an excellent cuisine. It was just the place to rest in, and that was what we chiefly did in Bombay. There was little sight seeing to be done. The tide was unfavorable to a trip to the cave of elephants, the chief point of interest, and the cholera scare kept us out of the bazaars. Therefore, we drove in the cool of the morning and evening and, for the rest, idled in the hotel courts and galleries. Bombay is practically a fine European city, with handsome houses and splendid public buildings. There are many attractive drives around the city, especially the one up the Apollo Bunder, past the Yacht Club to Malabar Hill, where the wealthy Parsees live. They form the most substantial element of the city, and, by their munificence, have founded schools, hospitals and homes for the aged throughout Bombay. Having migrated originally from Persia, they are followers of Zoroaster, and keep up the custom of burning fire perpetually in sacred places. On top of Malabar Hill is their cemetery, "The Towers of Silence." In order not to pollute the elements which they adore, they give their dead to the vultures, which swarm near, always ready for their prey. High and low are placed side by side, and their bones whiten together, for death, they say, levels all distinctions. We were admitted within the stone walls, and saw the four towers, but we were not allowed very near, and the place looked to us like a pretty garden.

In another part of the city is a strange institution, a hospital for sick animals, which the Hindu religion holds sacred. Chief among the sacred animals is the bull. The crocodile also is held in great reverence, and so are doves.

In the native quarter, we saw the most bewildering assortment of peoples, wild Afghans, and other semi-barbarians from beyond the mountains, mixed with various Indian casts. Sam, our guide, was now of great benefit to us. Sitting erect on the box seat of the carriage, he seemed to stand between us and the strange, dark people around us. At night, he slept at our door, on a mat, like a faithful watch-dog. Formerly, it was the custom of the guides to wait on their patrons in the dining

Silver
Spring

Herd
of

SHORT HORNS.

ROBERT R. SMITH, PROPRIETOR.

Charlestown, W. Va.
Jefferson Co.

-OR-

Wickliffe, Va.,
Clarke Co.

Farm in the best bluegrass section of each State; cattle out all the year, therefore hardy and healthy. Herd numbers 75; calves by a son of *Choice Goods*, out of dams by a son of *Gay Monarch*, also by the Scotch bull, *Minn's Secret*. Five 1-Year Bulls for sale, also a number of younger Bulls and Heifers at reasonable prices.

Short Horns are equally the most profitable breed of cattle, as they are the most popular, as a glance at the sale averages for the past five, ten or twenty years will show.

NEW YEAR'S

remembrances to The Southern Planter
family by
BURKE'S GARDEN CATTLE CO.

IN A SPECIAL DISCOUNT

on WIN McG. 38481, by Bay McGregor; dam's sire (Stoutwood) by Nutwood 600.
SHORT HORNS, HAMPSHIREDOWNNS, SOUTHDOWNNS.

Either Sex, Any Number, Both, No Akin.

Mammoth Bronze and White Holland Turkeys, Pekin Ducks, White and Barred Plymouth Rocks, White Wyandottes, Black Langshans, Brown and White Leghorns.

Our special prices will make this stock look like bargains. Not good after February 1st.

Lower rates and better express service, thanks to H. C. S., of Virginia Corporation Commission.

BURKE'S GARDEN CATTLE COMPANY, TAZEWELL, VA.

Inaleside Herefords



OWNED BY S. W. ANDERSON, BLAKER MILLS,
GREENBRIER COUNTY, W. VA.

A choice lot of Bulls, Cows and Heifers for sale; also, a few Polled Hereford Bulls, recorded in the National Polled Hereford Record.

Write for Catalogue and Prices.

FARM NEAR ALDERSON, W. VA.
Telephone and Telegraph, Alderson.

CASTALIA HEREFORDS

FOR SALE

At prices low enough to be within reach of all breeders and cattlemen generally.

A grand lot of Three and Four-Year-Old Bulls ready for active service.

Also Cows, Heifers and Calves.

Call and see this herd before buying elsewhere.

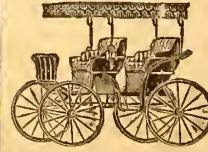
Keswick is on the C. and O. Railway, near Charlottesville. Visitors met at station.

MURRAY BOOCOCK, Owner,
KESWICK, VA.

Buy Direct From Our Factory

Saving all expenses and profits of the dealer. Elkhart Buggies and Harness have been sold direct from our factory to the user for 35 years.

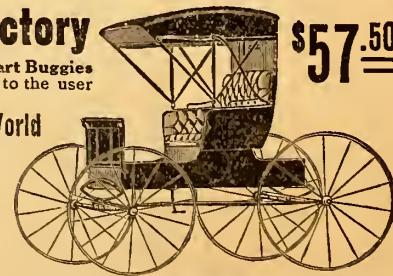
We Are the Largest Manufacturers in the World



No. 237. One Horse cutter
Surrey with bike gear,
auto seats and 1 1/2-in. cushion
tires. Price complete, \$103.
As good as sells for \$40 more.

selling to the consumer exclusively. We ship for examination and approval, guaranteeing safe delivery. No cost to you if not satisfied as to style, quality and price. Over 200 styles of Vehicles and 65 styles of Harness.

Send for New Free Catalog.



No. 676. Top Buggy with padded wing dash and Stanhope seat. Price complete, \$57.50. As good as sells for \$25 more.

ELKHART CARRIAGE & HARNESS MFG. CO., ELKHART, INDIANA

Berkshires

Jerseys

OVERTON HALL FARM

. M. OVERTON, Prop.

REUBEN GENTRY, Mang.

Station B. Nashville, Tenn.

O. H. F. Sensation 90900
Grand Champion Boar
at 7 State Shows 1906.

40 BRED SOWS AND 5 SPECI-
SELECTED BOARS.

Imp. Brookhill Fox 65303
Grand Champion Bull of
England and America.

SECOND ANNUAL PUBLIC SALE OF
BERKSHIRES
FEBRUARY 24, 1908.

40 BRED SOWS AND 5 SPECIALLY
SELECTED BOARS.

Catalogue containing full description and pedigree, ready February 1st, will
be sent only on application.

- **PIGS - PIGS - PIGS -**

We sell no pig not true to type, well marked and worthy to represent our
herd.

Pigs, either sex, eight to twelve weeks old, \$15 to \$20.
Pigs, either sex, twelve to sixteen weeks old, \$20 to \$35.
Animals of an older age are matters of special correspondence.
Every animal guaranteed sound, eligible to registration, and full extended
pedigree free. Registered at 75 cents additional. Crates to be returned at
purchaser's expense.

Address, REUBEN GENTRY, Mgr.,

Station B. Nashville, Tenn.

SOUTHERN STOCK YARDS,

West Broad and Mulberry Streets, Richmond, Va.

J. C. SMYTH, President.

A. L. McCLELLAN, VICE-PRESIDENT.

T. A. SMYTH, Secretary and Treasurer.

DIRECTORS: J. Smyth, A. L. McClellan, T. A. Smyth, C. C. Reed, O. J. Sands and H. E. Kline.

The Greatest Horse and Mule Market in the South.

A Commission Business in Horses and Mules.

Accommodations for 3,000 Head or More.

EVERY MODERN FACILITY AND SANITARY EQUIPMENT.

Horses and Mules at Prices to Suit Everybody.

**Saddle Horses, Carriage Horses, Draft Horses, Business Horses,
High-Class Driving Horses, Mules---Light and Heavy.**

If you want to buy a horse or a mule—one or ten thousand—for any purpose, at the
best possible price, in any grade, you can be entirely suited at the Southern Stock Yards.

Eighth of a Mile Track Straight Away Under Roof.

RESTAURANT IN THE BUILDING.

Auction Sales Every Wednesday and Thursday in the Year.

REGULAR SALES DAILY.

REGISTERED ABERDEEN-ANGUS BULLS

For sale at farmers' prices. Strictly Top Notch. Many of them Show Ring Animals. Also Good Females not akin to bulls.

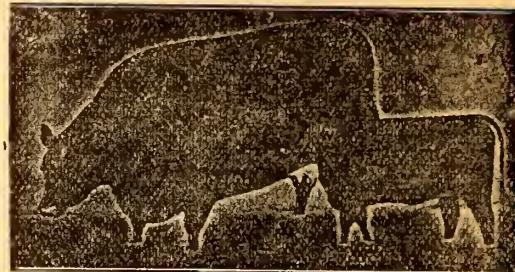
We are closing out, at little over beef prices, twenty head of pure-bred, but ineligible, females, four months to seven years old. A rare opportunity for farmers to get pure-bred stock at little more than the cost of common cows.

Special prices on February orders for Bull Calves.

To avoid inbreeding, we offer for sale our Herd Bull, "Knobley's Editor," 66226. Age 4½ years, weight 2,000 pounds. A magnificent herd header—broad, block and royally bred.

CORRESPONDENCE AND INSPECTION OF THE HERD INVITED
ROSEDALE STOCK FARMS, JEFFERSONION, VA.

Shipping Point, Warrenton, Virginia.



room, but this is no longer allowed in the hotels.

An English woman wintering in India told me she was much surprised when she gave her first dinner company to discover her dining room crowded with strange servants, but found that her guests had come attended by their private servants, which is a custom of the country. Another custom of the country amongst the boys is for them to demand ten rupres in Bombay to buy winter clothes before going north with the traveller. No matter how often they make the tour, each party must provide them with a winter suit, the climate of the north not permitting them to wear the "dhotee" or draped skirt of the south. Our guide (whom we called Sam) exchanged his for a very "loud" checked suit, a sailor hat and tan shoes, of which he was immensely proud, but we felt that his individuality and our respectability perished with his draperies.

When we started for the northwest provinces, the railway guard tried to put us in the compartment with his other ladies, but a friend with us protested and secured us a car to ourselves for the next day's journey, which was a great comfort, for we travelled over a barren waste of sand and could scarcely get a breath of air by ourselves. A fine powder sifted through the closed windows and covered everything. We could not keep clean, though we had the compartment swept and dusted at every long stop.

The country we traversed presented a very distressing appearance—it was so parched and dry. Scarcely a sprig of green was visible and cultivation of the fields was impossible. We were told there had been no normal rainfall for seven years, and none at all for three. Water! water! was the universal cry. England has great schemes of irrigation, which will eventually do away with this misery, but in the years of waiting for it to be carried out there is untold suffering among the inhabitants of this

SUNNY HOME FARM ABERDEEN ANGUS CATTLE

Are the sort that "breed on," because of the superior breeding of the animals comprising the herd.

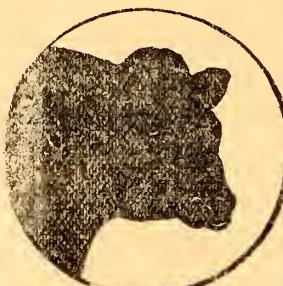
The herd bulls are "Baron Roseboy" by the famous Gay Blackbird, and "Jester" by Imp. Equester (the best bred Eric Bull ever imported).

Females are by Gay Blackbird, Beau Bill (champion over all breeds in America in 1894), Ermoor by the great Royal Eric; Eulalie's Eric, a Columbian winner, and by the noted Heather Lad II, and some of the best in the herd are by our own Baron Roseboy. We have only young calves for sale, but want to book you for one of these finely-bred ones before they are all sold. Write

A. L. FRENCH, PROPRIETOR.

Station: Draper, N. C.

Byrdville, Va.



THE DELAWARE HERD OF ROYAL ANGUS CATTLE

is not surpassed either in breeding or individual animals by any herd in the East. At the head of our herd is

PRINCE BARBARA, 68604, the son of the great \$9,100 Prince Ito. Females of equally choice breeding. Write your wants. Remember, we take personal care of our cattle; keep no high-priced help; incur no expense of exhibiting, all of which enables us to offer stock at equitable prices. Send for pamphlet.

15 Bulls from 2 to 16 months old for sale.

MYER & SON, Prop.

Bridgeville, Del.

4 REGISTERED JERSEY BULLS

from 2 to 17 months old, out of fine cows and sired by Rinora's Rioter of St. Lambert, Jr., of Bowmont Farms; also a few Cows fresh to pall.

S. C. BROWN LEGHORNS, Brace's Strain of New York.

S. C. RHODE ISLAND REDS, Bryant's Strain of Massachusetts.

EGGS IN SEASON.

EVERGREEN FARMS, W. B. Gates, Proprietor, Rice Depot, Va.

Horsemen and Stockbreeders, Attention

We can save you big money on highest grade Veterinary Instruments, Milk Fever Outfits, Teat Instruments, Milking Tubes, Trocars, Syringes, Dehorners, Impregnators, Breeding Hoppies, etc. Write to-day for large FREE Illustrated catalogue. It costs you nothing and will interest you.

THE DETROIT INSTRUMENT COMPANY, 44 Congress St. W., Detroit, Mich.

MORVEN PARK.

The Property of **WESTMORELAND DAVIS, Esq**

Imp. Large White Yorkshires.

This breed of pigs is the one best adapted to supply the ever growing demand for bacon and hams. The displacement of lard for cooking, and the growing distaste for salt pork and the thick fat sides that used to be in favor, have caused the price of heavy fat hogs to drop while there is a sharp demand for light hogs of the bacon breeds from six to eight months old and weighing 150 to 175 pounds. Fortunately, the Yorkshires are the ones to make the farmer the most profit, and the introduction of a good Improved Large White Yorkshire boar into a neighborhood confers a greater benefit and makes the breeders more money than an investment often many times the amount paid for him. The result is a succession of crops of strong, hardy, thrifty and profitable pigs ready to turn off at six to eight months at the highest market price, and to make the most profitable fresh meat or bacon sides, hams and shoulders for the farmer's own use. It is the universal testimony of those who have raised Improved Yorkshires or crosses of that breed that the meat is superior to that of any other breed for home use or market. The requirements of the farmer and the bacon curer are identical. Both require a pig of quick growth and early maturity, (and by maturity is meant early fitness for market); both want pigs that dress handsomely and with little offal. No pigs shrink less in killing than Improved Yorkshires. The bacon curer finds that the best pig for use is one with a long, deep body, wide and square in the hind quarters and comparatively light in shoulder and neck. The farmer finds that such a pig is the hardest, most prolific, most vigorous and most growthy of all the forms known to pigdom.

The herd which was founded on imported animals, selected with extreme care both for their individuality and breeding, includes representatives from the most noted herds of Great Britain.

With so many families we are at all times in a position to supply boars and gilts unrelated and make a specialty of foundation herds.

ALSO—

Regd. Dorset Sheep

AND

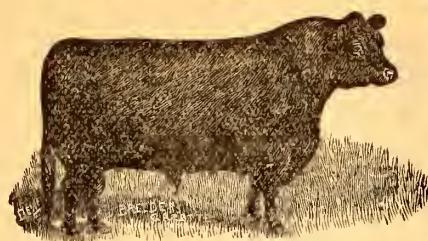
Regd. Guernsey Cattle.

Address

LIVE STOCK DEPARTMENT, MORVEN PARK,

LEESBURG, LOUDOUN CO., VA.

RED POLLED CATTLE.



Will sell Thirty Head to reduce herd to fifty before stabling for winter. Special terms to those starting herds. Part cash, part time. The RED POLLs are best for the South or for the farmer anywhere. Examine their records for milk, butter and beef.

A few DORSET SHEEP for sale. We imported Buck and Ewes from England last year. First prize at Royal Counties and Royal Agricultural shows.

POLAND-CHINA HOGS, Pure-Bred Poultry, Albemarle Prolific Seed Corn.

ARROWHEAD STOCK FARM,
SAMUEL B. WOODS Prop. Charlottesville, Va.

region. They seemed to be on the verge of famine at the time I am describing. The air was tense with the burden of it. Everywhere the people showed the lack of food. Their frames were emaciated, scarcely more than skin drawn tightly over their bones. Their faces wore a look of patient endurance, which haunts me yet. The children lay kicking on the burning sand with nothing to protect them from the fierce rays of the sun which beat down mercilessly on them. Here and there were clusters of mud huts with no sign of any human sustenance near them. Over this scene of desolation there comes a golden sunset, and great flocks of camels were silhouetted against the glowing sky.

Our first stop was at Jaipur, a native city, capital of the territory of Rajputana. We had expected to stop at Mrs. Rustum's private boarding house, but Sam, our guide, had other plans, and carried us off to the Kaiser-i-Hind, where a dusky host met us and carried us into a bare room, without any comforts or conveniences. Usually, on arriving at one of these "Dak," bungalows or native hotels, the squawks of the chicken in the court yard announces what dinner will consist of—viz., chicken soup, and roast chicken with curry, concocted from the same old veteran rooster. Not so, however, at the Kaiser-i-Hind. We had meat and vegetable stews, birds served with cabbage and onions, and bread and coffee too vile to be mentioned in polite society. On the whole, bad hotels are favorable to sight seeing, and they drive people out to do and see things. In the good ones, there is little tempaation, in so hot a climate, to move off the veranda. To see India comfortably, one should rise with the sun, take "chota hozra" (early tea) and go straight out, to stay till the sun gets hot, when one can return to breakfast and stay indoors until the heat begins to abate in the afternoon.

Jaipur was the beginning of the interesting part of our trip, as it is a purely Indian city, and that was what we wanted to see, and not an English colony. It is called "the pink city of

PALMETTO FARMS

AIKEN, SOUTH CAROLINA,

OFFERS FOR SALE

3 Registered Red Polled 3

Yearling Bulls, sired by the great Sir Kenneth and from high-class cows. Sir Kenneth weighs 2,400 pounds in good condition, yet exemplifies the real dual purpose quality of the breed fully. The cows of herd are large milk producers.

We also offer one fine BERKSHIRE BOAR, 15 months old, and weighs 400 pounds, and three nice SOWS AND PIGS, 2 to 6 months old, from large sire and dams.

Address A. W. REYNOLDS, Manager, R. F. D. 3, Aiken, S. C.



QUALITY POLAND-CHINAS

The large, mellow kind—NOT the coarse and rough type. They must be good with such a herd header as BLACK PERFECTION, a son of the old king of Poland-Chinas, Chief Perfection II. A few CHOICE PIGS and BRED SOWS for sale.

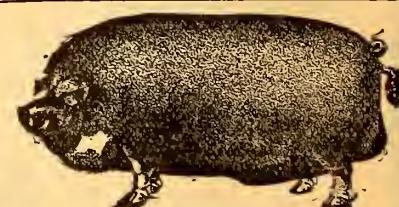
H. B. BUSH & BRO.,
Michaux, Powhatan County, Va.

"Fat or Lean, You May Have Them."

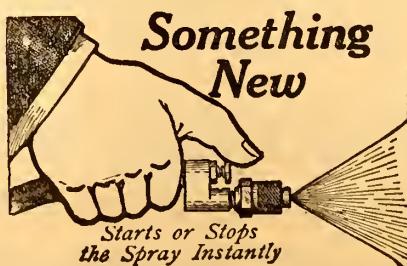
POLAND-CHINA AND TAMWORTH

Pigs (registered) at farmers' prices.
Also a few Boars ready for service.

Send in your orders now to



J. C. GRAVES,
BARBOURSVILLE, ORANGE COUNTY, VA.



The "Kant-Klog" Sprayer

Gets twice the results with same labor and fluid. Send postal today for free interesting booklet, explaining how the "Kant-Klog" gives

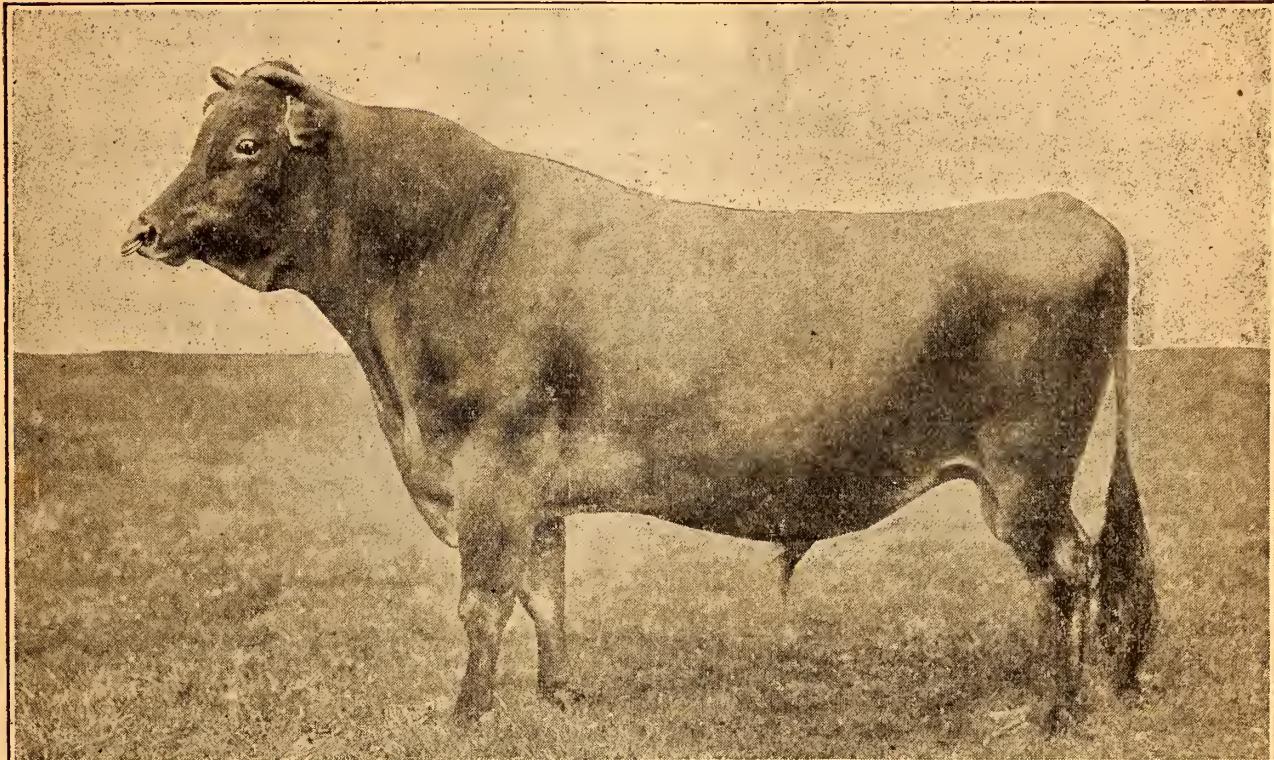
Nine Sizes of Round or Flat Fine or Coarse Sprays

or solid streams all from the same nozzle. Ten different styles of sprayers for all kinds of spraying, whitewashing, etc., etc.

AGENTS WANTED
Rochester Spray Pump Co., 21 East Ave., Rochester, N.Y.

Wyldewood Farm Jerseys.

Herd numbers 300, including some of the finest the island has produced, headed by the great sire Stockwell, whose abbreviated pedigree is given below.



Imported Stockwell, 75264.

Stockwell.	Sire	Oxford Lad, P. 3123 H. C.	Flying Fox, 61441. Oxford Lass, P. 3582, H. C.	Golden Fern's Lad, P. 2160 H. C. Sultan's Rosette, 149740.
	Dam	Golden Leda, P. 8000 H. C.		
			Golden Fern's Lad, P. 2160 H. C. Leda, P. 6636 H. C.	Boyle, P. 1559, H. C. Golden Fern, P. 4711 H. C. Golden Pearl, P. 1975 H. C. Eminence, F. 7124 H. C.

For Particulars of Offerings, General Information, etc., Address

Wyldewood Farm, Fredericksburg, Va.

the Empire," and is one of the most beautiful and interesting in India. It is the home of an English president, but is ruled by a native prince, with a splendid court, and does not show any foreign influence. It is surrounded by solid walls and lofty towers and well protected gateways, and laid out with broad, regular streets. The whole city is built of pink stucco with white trimmings and the effect is dazzling. We drove down the wide main street as the market opened, and camels laden with grain discharged their burdens. Much of it was being distributed in alms, by the Maharajah's order, to the famine sufferers, who pressed eagerly for their portion. Around us a busy trading life was going on.

For those who have no time nor inclination for the occult sciences, the chief interest in India lies in the great variety of races and peoples you encounter there, for, being near the cradle of mankind, it is a great museum of races, where we can study man from his lowest to his highest stage of culture. There are comparatively few strains amongst them, but the great masses are formed of the mixed progeny of the Aryan or white race, and the aborigines whom they overcame. Their skins are dark, with the white shining through it, if that is not too vague an expression. They have a noble physique and their features are finely chiselled, with the intelligent brow of the higher races, where the conditions of life are not too hard. With a little prosperity, the Indian is a happy and useful citizen. Too much prosperity is bad for him. When England lays her hand upon him, and gives him her uniform, the native outgrows his environment and lives up to his official dignity in a wonderful manner.

Caste still holds India tightly bound. There are first the Brahmin, or priests, sprung from the head of Brahma; next, the Rajputs, or warriors, sprung from his shoulders. Below these are the agricultural classes, or Vaisyas, sprung from his thighs, and lower still, the Seidras, or servile class, sprung from his feet. These castes are perfectly distinct, and there is no communication between them. Besides these are the Varna-Sankara, literally "mingled colors," 300 castes of mingled descent from the four principal ones.

OF HER OWN ACCORD.

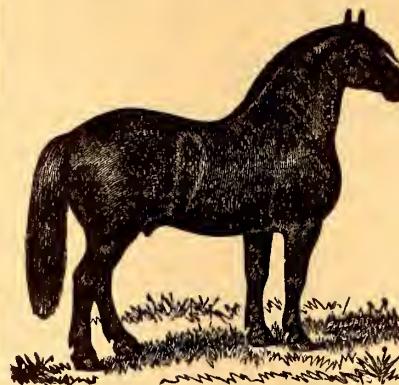
The day the doctor called to treat little Klitty for a slight ailment, it was only by the most persistent persuasion that he succeeded in getting the child to show him her tongue.

A few days subsequent to this the child said to her mother: "Ma, the doctor don't have to tease me to obey him any more!"

"Why not?"

"Cause every time I see him going by the house now I stick my tongue out at him!"—Lippincott's.

SELMA STOCK FARM



PURE-BRED REGISTERED
PERCHERON STALLIONS
MARES AND COLTS.

Imported and Home-Bred. Blue Ribbon
Winners wherever shown in France and
America. Positively Highest Quality.

COME AND INSPECT THEM.

E. B. WHITE, Prop.,
Leesburg, Va.

IN THE STUD "WEALTH" RECORD 2:10-BY GAMBETTA WILKES

AT SHETLAND STOCK FARM
ONE MILE SOUTH OF RICHMOND ON RIVER ROAD.
FASTEAST AND BEST BRED STALLION IN VIRGINIA.

Write or 'Phone for Terms.

STONERIDGE JACK

A young Spanish Jack who has twice won first prize at Virginia State Fair, will also make fall and spring seasons at my farm.

MARES IN FOAL, HORSES AND MULES FOR SALE.

'PHONE 4464-L.

Address SHETLAND STOCK FARM, R. F. D. 5, Richmond, Va.
I. J. Coffin, Proprietor.

Glenburn Berkshires.

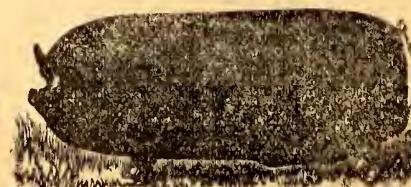
Lord Premier and Premier Longfellow are dead, but we have their sons. Our **LORD PREMIER III.** is not only a son of Lord Premier, but is a litter mate to Lord Premier II and a brother in blood to Lord Premier's Rival **PREDOMINANT** and **DOMINANT** are probably the best sons of Premier Longfellow. **IMP. LOYAL HUNTER** is a great individual. We have Lord Premier, Premier Longfellow, Masterpiece, Charmer's Duke XXIII, and fine imported sows.

FORFARSHIRE GOLDEN LAD JERSEYS.

Write for Catalogue.

Dr. J. D. KIRK, Roanoke, Va.

No Finer Herd on Earth Than Mine.

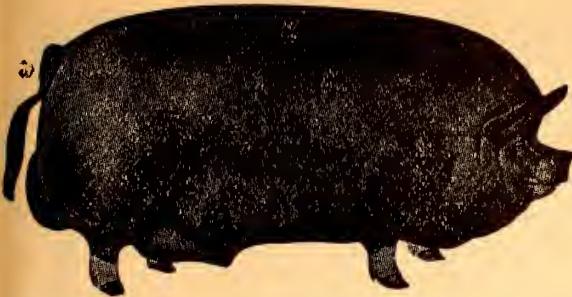


about thirty brood sows. A number of these are imported.

The service boars are imported Sir John Bull, II, No. 76416; Uncle Sam, No. 79671; Columbus Lee, III, No. 92309, right from the loins of Lord Premier, No. 60001; Fannifer Masterpiece, a fac-simile of his famous ancestor, Masterpiece, No. 77000. I have just added Belle of Biltmore, No. 100572, sire King Hunter, No. 79378. She should farrow November 10, 1907. Also a Canadian sow and additional imported Luster's Bachelor sows. I keep

THOS. S. WHITE, Lexington, Va.

When corresponding with our advertisers always mention Southern Planter.



WOODSIDE BERKSHIRES

EVERYTHING SHIPPED ON APPROVAL.

IT WILL PAY YOU TO READ THIS CAREFULLY.

We are now offering a grand lot of Pigs sired by our three boars—Charm-r's Premier, '4553, 1-year old, weight 550 pounds; Master Lee, 79 79, 2-year-old, weight 760 pounds; and Lustre's Carlisle, of Biltmore, 72057, 3-year-old, weight 790 pounds, and out of royalty-bred sows weighing from 500 to 600 pounds each. Also Young Sows guaranteed safe in pig to Charmers' Premier and some extra good Young Boars from 4 to 8 months old.

We can always furnish pigs not akin. In order to show our confidence in what we offer, and insure satisfaction to our customers, we ship everything on approval. You need not send check until after you receive the pigs, and if they are not entirely satisfactory in every respect, you can return them at our expense and it costs you absolutely nothing. We leave it to you whether this is a fair proposition. Address

WOODSIDE STOCK FARM, R. S. Farish, Prop., Charlottesville, Va

ENQUIRERS' COLUMN.

All enquiries much reach us by the 15th of the month previous to the issue, or they cannot be answered until the month following.

LICE ON HORSE.

Can you tell me in your next paper what to do for lice on a colt two and one-half years old.

ROBT. W. BATTEN.

Wash well with soapsuds and a brush and then apply a solution of tobacco made by boiling one and a half ounces of tobacco in two pints of water. Apply the tobacco solution repeatedly for fifteen days to destroy the lice as they hatch out.—Ed.

CELERY ROTTING.

I am situated near Cockeysville, Baltimore county, Md., and up to this year have always been able to raise first class "celery." This year, however, notwithstanding the bed looked very good when covered up in the fall, I find it now to be almost all rotten. Sometimes the outer stalks will be good and the heart will be rotted. The land is high with clay subsoil and a good rich gravel on top. The only thing I have noticed is there seems to a great many large earth worms. If you can explain this, and also advise me what celery would do the best in my locality I would very much appreciate it.

FENTON KEY.

The rotting of the celery is caused by a bacterial disease. This can be best prevented by spraying frequently during growth with ammoniacal carbonate of copper or Bordeaux mixture and by the use of ventilators in the storage house and by keeping the crop dry when stored. Send to your Experiment Station, College Park,

Great Berkshire Sale.

I am now offering an exceptionally fine lot of 2-Month-Old Pigs of the very best blood and individuality. They are out of large and handsome sows of the famous Silver Tips and Storm King families and were sired by my two great Boars, Hunter of Biltmore III, 86468, and Valaria, 88706. If you want the best blood and quality that money can buy and at a price farmers and breeders can afford to pay, you should order some of these. Remember, I send everything on approval and have them returned at my expense if you are not entirely satisfied. Write for prices.

D. E. KARHART, NOKESTVILLE, VA.

IF YOU WANT THE BEST HOG

Buy from those who give their sole attention to the production of the greatest Berkshire type. We do.

Our herd comprises the most splendid lines of breeding and individuality that money can buy or experience develop in American and English Bred Berkshires.

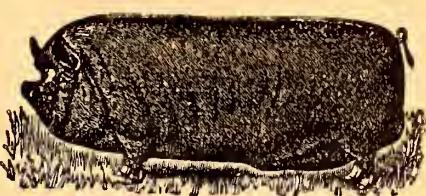
"Lord Premier of the Blue Ridge," 103555, the greatest living boar, heads our herd. If you are interested write.

THE BLUE RIDGE BERKSHIRE FARMS, ASHEVILLE, N. C.

THE GROVE FARM

BREEDER OF PURE-BRED BERKSHIRE HOGS AND HOLSTEIN-FRIESIAN CATTLE. TWO FINELY-BRED BULL CALVES FOR SALE.

T. O. SANDY, BURKEVILLE, VA.



MATTHEWS' "NEW UNIVERSAL" GARDEN TOOLS

6 TOOLS IN ONE



Send for FREE BOOKLET of valuable information for planting and cultivating the garden and full description of these implements.

AMES PLOW COMPANY, 56 MARKET STREET, BOSTON, MASSACHUSETTS

FOR SALE BY GRIFFITH & TURNER COMPANY, BALTIMORE, MD.



6 Styles Seeders

Opens furrow, drops in plain eight cover marks.



Hand Wheel Plows
Rear wheel gives steadiness & ease.

Double or Single Wheel Hoe

Cultivator, Plow, Rake, Changes quickly made. Cultivate between or astride the rows. Any depth, any width.



Note High Arch and Plant Guard. Bent Oak Handles on all Tools.

Md., and ask the Director to send you bulletin 74 which will give you full advice on celery culture.—Ed.

MOULDY CORN.

I wish to ask if you will give me what information you can about soft and mouldy corn and if same can be treated in any way to render it fit feed for horses.

We are told that it can be fed to cows, hogs and steers but that it is dangerous to feed to horses.

Is there any way the soft corn we have taken out of crib and spread over barn floor, can be treated to harden to keep it from moulding. I had thought of partially baking it over wood fire in terra cotta pipe laid on ground in the way that sand is dried out for building purposes.

We have several hundred bushels of this corn and its loss will be a serious thing to us.

Devon, Pa. R. BROGNARD OKIE.

Mouldy corn cannot be made a safe feed for horses. You can use it best with hogs. If you can get it dried in a kiln or over the pipes as you suggest it will prevent it getting worse and enable you to keep it for the hogs and cattle though it is not a very safe feed for cattle.—Ed.

LICE ON HOGS—GRAIN WEEVIL—LIMING LAND.

1. What will rid hogs of lice? I have applied kerosene oil and yet they seem to be there. Is it because I don't put it all over them?

2. Last spring and summer my corn was damaged very much by a small moth, or miller-like insect. Seemed to have been in the grain and come to top leaving small hole in grain. Is there any remedy for it? Or is it caused by wet seasons?

3. I have about four or five acres of land that was in peanuts last year and it made so many poppy peas I concluded it was lack of lime and I want to sow it to cow peas and lime it. When would you advise applying lime, before sowing or when turning under vines? I want my hogs to get the cow peas. Can I profitably put lime on and turn under with dead vines and how much lime per acre?

4. How can I tell when land needs lime? Is there danger of getting on too much? How is best method to apply it and what kind best to use for sandy loam?

I am a new subscriber to the Planter and it has put me to thinking. The first copy I received was worth more than price of paper one year.

C. D. HAVETRY.

Isle of Wight Co., Va.

1. Kerosene is usually effective in ridding hogs of lice. It should be sprinkled along the backbone all the length of the hog and will then spread all over the body and will certainly

When Eggs Are Eggs

How do you manage your poultry business? Are you content to gather a moderate supply of eggs in springtime when prices are low, or do you aim to get your greatest number during the winter months when prices are up and "eggs are eggs?" The way to succeed with hens is to do what others *don't* do. When your neighbors' hens are on strike, then see that yours "get busy."

If you will begin *now* to feed Dr. Hess Poultry Pan-a-ce-a your hens will not stop laying at all. Of course the moulting season is an "off time," but even then Poultry Pan-a-ce-a will make a few eggs, and if you continue to give it regularly, you will get an abundance all through the cold winter days when others get none.

DR. HESS Poultry PAN-A-CE-A

is the prescription of Dr. Hess (M. D., D. V. S.) and is composed of elements which assist digestion, make good blood and cleanse the system of clogging poisonous matter. It is also a germicide and *prevents* poultry diseases. It has the unqualified endorsement of poultrymen in the United States and Canada, hastens the growth of young chicks and helps fatten old or market fowls. A penny's worth a day is sufficient for 30 hens.

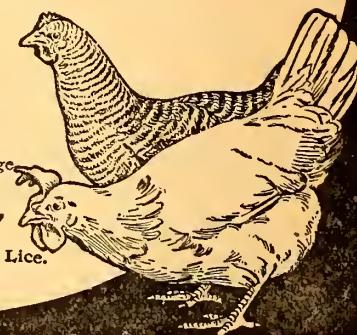
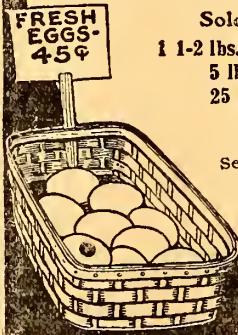
Sold on a written guarantee.

1 1-2 lbs. 25c.; mail or express 40c.;
5 lbs. 60c.; 12 lbs. \$1.25;
25 lb. pail \$2.50.

Except in Canada and
extreme West and South.

Send 2 cents for Dr. Hess 48-page
Poultry Book free.

DR. HESS & CLARK,
Ashland, Ohio.
Instant Louse Killer Kills Lice.



KEELEY CURE

RICHMOND, VA.

Removes All Desire for Liquor.

Inebriety—caused by excessive use of Liquor, Drugs, or Tobacco—is recognized as a disease of the nervous system. The Keeley System of Treatment Cures the disease by eliminating all physical craving for drink, drugs or tobacco, builds up the nervous system, and restores the nerve cells to a normal, healthy condition. The Keeley Institute of Richmond cures and gives homelike, confidential treatment, administered by skilled physicians.

The Keeley Institute, 908-10 East Marshall St.
P. O. Box 786. OTIS H. RUSSELL, Manager.

kill the lice it touches. Some hogs have very tender skins and cannot stand the pure kerosene. When this is the case use kerosene emulsion made as follows: Hard soap, half a pound, boiling water one gallon, kerosene two gallons. Dissolve the soap in the boiling water, add the kerosene and churn violently until the mixture becomes like buttermilk, dilute with water until it will not affect the skin and yet will kill the lice.

2. The insect was one of the grain weevils, probably the angumous moth. The injury is done by the small grubs which feed on the grain during the winter. The moth lays the eggs on the corn in late summer and early fall and these hatch out the grubs which then eat their way into the kernels and often very seriously damage a crib of corn. They are difficult to prevent but usually do not seriously injure corn which is shucked in the early fall and stored in a crib. They may be killed by subjecting the corn to the fumes of carbon bi-sulphide in a tight bin or a granary. Seed should not be used when it has been injured by this grub as its vitality is greatly impaired and often destroyed.

3. Lime will remedy the difficulty of the "pops." Sow the cow peas and graze them as you desire and then apply lime at the rate of one ton to the acre and plow down the dead vines left on the field.

4. The use of litmus paper will indicate whether the soil is acid or not. You can get the litmus paper from a drug store and put a strip into the fresh soil and let stay for an hour or two when it will turn red if the soil is strongly acid. There is often, however, a sufficient degree of acidity in the soil to injure the growth of crops which the litmus paper will scarcely indicate. You may take it as a general proposition that all the land in Middle Virginia needs lime. We have had this tested all over this section and never without good results being attained by its use. In the last issue in a note to an article "Corn Fodder and Lime" you will find full advice as to use of lime and how to apply it. Use either shell or rock lime, whichever you can get cheapest.—Ed.

ALFALFA—TOBACCO STEMS.

How would it do to sow alfalfa in late corn at last cultivation early in August, where land was well prepared and corn frequently cultivated

2. What is the analysis of tobacco stems. B.

Henry Co.

1. Alfalfa is intolerant of shade and therefore should not be sown with any other crop nor should the land in which it is sown be full of weed seeds or they will undoubtedly smother and shade out the crop. Read the article



The costliest materials form only about one-third of a painting bill. The rest of the money is paid for labor. A mistake in the paint means not only the loss of what the paint cost, but also the loss of the entire expenditure for putting the worthless stuff on the building. It is quite worth while to *test the paint before using it.*

The best paint is that mixed from *Pure White Lead* and *Pure Linseed Oil*, with the particular needs of your building, wagon or implement in view. There is a simple test which anyone can make.

White Lead is made from metallic lead and can be changed back to that metal by applying great heat. Any adulterations, such as chalk, barytes, or other counterfeits, mixed with the White Lead, prevent the appearance of *any* metallic lead, no matter how slight the adulteration. Therefore, if the sample yields drops of lead, it is pure; if not, it is adulterated.

We Will Send You a Blowpipe Free

We want property-owners to know how to test paint. We welcome the test of our White Lead and will furnish free a blowpipe (a little instrument necessary to secure intense heat) to anyone who is earnest about knowing good paint from bad. Everything necessary for the test, together with beautiful booklet, will go to you at once. Write for *Test Equipment* 14 Address

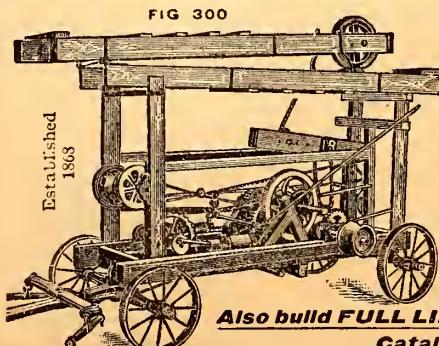
NATIONAL LEAD COMPANY

in whichever of the following cities is nearest you:

New York, Boston, Buffalo,
Cleveland, Cincinnati, Chicago,
St. Louis, Philadelphia (John T. Lewis
& Bros. Co.); Pittsburgh (National
Lead & Oil Co.)



FIG 300



THE American Well Works

AURORA, ILL., U. S. A.
CHICAGO, ILL. DALLAS, TEXAS.

Build the Standard BORING, CORING or ROCK PROSPECTING MACHINERY

Your Traction Farm Engine will successfully drive, in prospecting, that OIL, GAS or WATER problem.

Also build FULL LINE heavy PUMPING MACHINERY.

Catalog mailed on request.

in this issue on alfalfa by Mr. Frank-
lin.

2. Tobacco stems analyze on the average 2.35 per cent. nitrogen, 8.20 per cent. potash, 0.7 per cent. phosphoric acid.—Ed.

HOG PASTURES.

1000 ARTICLES.

In your last issue a correspondent recommends several lots in which to grow grazing crops for hogs, one of which it to be a permanent grass lot for the hogs to graze on and one for artichokes to be rooted out by the hogs. Now I would like to ask how to keep the hogs from rooting out the grass in the permanent grass pasture as well as the artichokes.

Henry Co., Va.

Whilst the hogs may do some rooting in the grass lot, yet experience shows that when they have good grazing to eat they do not do much rooting. In the winter when the artichokes are to be rooted out they do not have grazing crops to eat and soon find out that there are tubers underground from which they can make a good meal and they take to rooting them out naturally. The hog has a fine sense of smell and soon discovers when there are roots underground of which they are fond.—Ed.

MERCURIAL OINTMENT—FERTILIZER FOR CORN—LIME.

Please give me a formula for mixing mercurial ointment. Also give me a formula how to mix potash with acid phosphate for peats and corn. What quantities of each. I want to drill it.

Would oyster shell lime or rock lime slackened be any benefit to either corn or peas used through the planter or the drill. Would it go through a planter if it was run through a sieve.

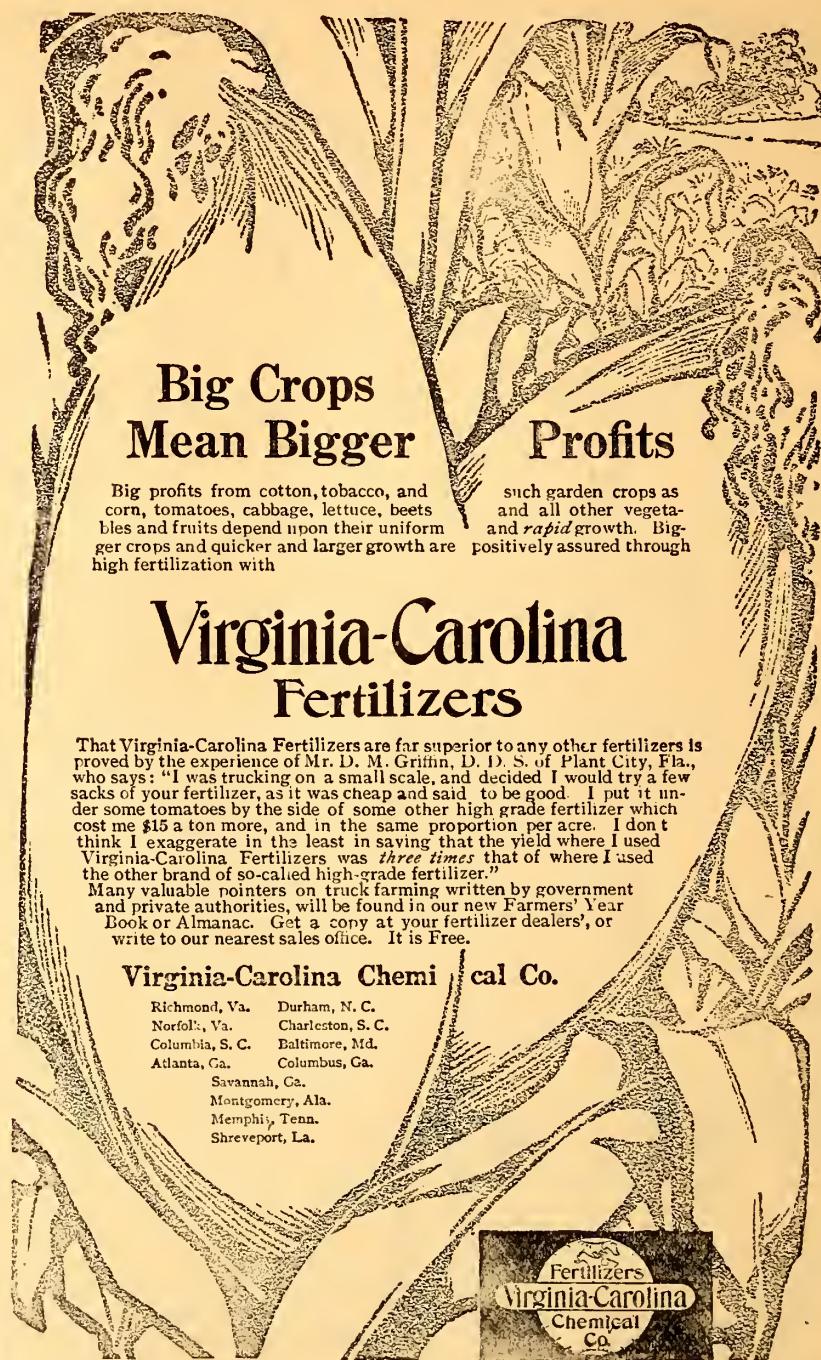
Henrico Co., Va. A. G. A.

1. We do not have a formula for mixing mercurial ointment. You can get it at any drug store as cheap or probably cheaper than you can make it and better mixed.

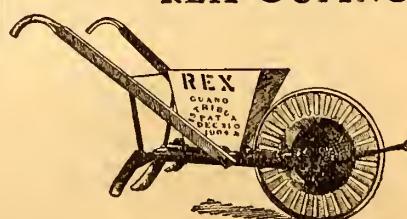
2. We do not think you will get any benefit from using potash in the fertilizer for a corn crop in this section. This is the experience of those who have tried it. If you will apply one ton of lime to the acre as soon as the land is plowed and harrow it lightly and let lay for a week and then prepare the land well for the corn seeding, this will make the potash in your land available and you will get better results at less cost than buying potash. The lime should be applied broadcast with a shovel and not with a planter. A planter will not put sufficient on. Acid phosphate alone at the rate of 200 pounds to the acre will usually give the best results on corn. See page eight of the January issue for report of the experiments made at Blacksburg in 1906 with different fertilizers on the corn crop.—Ed.

BERMUDA GRASS.

BERMUDA GRASS.



REX GUANO DISTRIBUTOR



A FORCE FEED MACHINE. The feed mechanism is a spiral conveyor, making a perfectly uniform feed; spreads the fertilizer in a broad band, thereby increasing its value; makes no noise; easily regulated to sow any quantity from 200 to 800 pounds per acre. Once set, the feed never changes.

Write for circular and prices on the
only Distributor on the market with a
perfect feed.

JOHN BLUE, LAURINBURG, N. C.

When corresponding with our advertisers always mention Southern Planter.

any truth in the story that the smoke from burning Bermuda, wire, or joint grass (like Satan it has a multitude of names) will take root and grow where it has been blown down on plowed land? If it is so, is there no law to protect us from neighbors who so recklessly imperil our farm property? A man ought to be lynched if so monstrous as to advise the novice to sow or plant such a curse. Talk of the "Great White Plague," a small matter in comparison.

Alexandria, Va. ROBT. STEVENS.

It is really astonishing how some men will allow their judgment to be run away with by their prejudices. Because our correspondent finds Bermuda grass troublesome on his plowed land he jumps to the conclusion that it is a universal curse and because it grows so persistently assumes that it outrages all natural laws and comes to life again after it has been killed and decides offhand that lynching is the only punishment good enough to be awarded to a man who says a good word for it. Of course Bermuda grass cannot be produced from smoke. If it could many a man in the States south of this one where grass is difficult to get would quickly smoke all his fields. In all the Southern Coast States Bermuda grass makes the finest pasture of any grass grown and no sun however hot can kill it out or render it useless as a pasture. It will give more feed and richer feed in those States than Kentucky blue grass and Kentuckians who have settled in the Southern Coast States say they would not give one acre of it for two or three of Kentucky blue. In plowed land it is troublesome and ought not to be allowed to get there and if care is taken not to carry the root stalks into the field it will not get there, as little if any seed is produced by this grass in this country. The seed sold is all imported. If it gets into plowed land two years' growth of a shade crop will kill it out. We have known it killed out in one year with a heavy corn fodder crop.—Ed.

BAD MILK.

I have a cow whose milk yields no butter in cold weather. We made one pound per day last summer.

The milk is sweet and delicious when fresh milked, but not so good after say twenty-four hours. The milk will not sour nor turn to clabber. The cream will rise, come to the surface and become strong and rancid after twenty-four hours. If you can tell me anything through the columns of your farm magazine please do so.

Gloucester Co. C. T. ROANE.

A cow's milk at the end of a long period of lactation naturally becomes not only less in quantity but also much less rich in butter fat and the glob-

Fine Cotton

Immense yield assured by fertilizing with Nitrate of Soda. Three hundred more planters may take advantage of our generous experiment offer. We send, **Absolutely Free**

to the first planters who apply, enough Nitrate of Soda to let them try it. Write at once as this offer is necessarily limited. To the twenty-five planters sending the best results from these trials, we offer as a prize, Prof. Voorhees' book, "Fertilizers," a most valuable work for every planter, containing 327 pages, handsomely bound. "The Cultivation of Cotton," another book of useful information, will be sent free to farmers, if paper is mentioned in which this advertisement is seen. Send name and complete address on post card.

WILLIAM S. MYERS
Director
John Street and 71 Nassau
New York



ARE YOU GOING DUCK SHOOTING?

Or Any Kind of Shooting?

Then Start Right

By ordering one of our High Quality Winchester Repeating Shotguns. Notwithstanding the care of manufacturing, and superiority of these guns, we ask you no more than you would pay for inferior makes.

DESCRIPTION: Winchester Repeating, 12ga., six shots, standard gun has 30-inch barrel, blued, rolled steel, full choke, stock 13 $\frac{3}{4}$ inches long, pistol grip. (We can supply 26, 28 and 32-inch barrels or stocks 13 inches long at same price.)

STRENGTH: All barrels receive, at the factory, a proof test heavier than the English Government proof test. All other parts of gun are carefully tested.

LOW PRICES. Owing to the fact that these guns are made by the largest manufacturers of arms in the world, using modern machinery, thus turning out guns in large numbers, we are enabled to sell these High-Grade Guns at the following low prices:

12 Gauge, 6 shots, solid frame, 26, 28, 30 or 32-inch barrel. Price \$20.
12 or 16 Gauge, 6 shots, "take-down" style (16ga., 26 or 28-inch barrels). Price \$21.60.

ORDER NOW and be sure to give gauge, length of barrel and style of bore.

MAIL us your order with cash (the only way we sell).

FREE.—Our big catalogue, an encyclopedia of arms and ammunition, guns of all desirable weights, calibers and styles to suit individual taste and requirements. It is free—write to-day.

ROBT. A. MORRISEY'S
Box 240 S. P.

MAIL ORDER
HOUSE, :: :
RICHMOND, VA.

SCIENTIFIC

N220 N230

HIGH GRADE Feed Mills for small power Engines. Grind ear corn and all small grains. Lightest running and fastest grinding mills ever built.

50 STYLES AND SIZES

Fully guaranteed. Write for Catalog and special prices.

THE FOOS MFG. CO., Box 123 Springfield, O.

6-10 HP 6-10 HP

ules of fat do not separate so readily from the milk. Especially is this so if the cow is again with calf. Nature reserves this for the support of the growing foetus. Then again it may be that you are not feeding the cow a ration from which she can readily make the butter. In the summer she was getting grass, a highly succulent feed, now she is on dry rations and these never make the flow of milk or its quality so rich as grass unless very carefully balanced and some succulent food also be fed. The souring of the milk is affected by the temperature. The bacteria which causes souring grows very slowly in cold weather. Hence milk to be preserved is always kept at a low temperature. The bad or rancid character of the milk is caused probably by some bacteria which gets into it after it is milked. Milk readily absorbs all odors and is quickly contaminated in this way by unclean surroundings or in unclean vessels. It may be also that something she is eating is causing the milk to have this tendency to a bad flavor and odor. Try a change of feed and keep scrupulously clean all vessels in which it is kept and raise the temperature of the milk room where it is kept for the cream to rise. If the cow is advanced in pregnancy dry her off and let her have the chance of making a better calf and a better and longer milk production after she becomes fresh again.—Ed.

FERTILIZER FOR CORN.

1. I wish to cultivate smooth, level, thin land in corn another year. What kind of fertilizer should I use to increase the yield?

2. Would it do to broadcast bone meal and harrow in one month before planting? S. M. C.

Franklin Co. Va.

1. If you will refer to page three of the January issue you will find a report of the results of the experiments made at Blacksburg in 1906 with different methods of fertilizing the corn crop. Next to farm yard manure and green crops plowed down acid phosphate gave the best results.

2. Bone meal no doubt would give good results but the cost would be greater than the acid phosphate and it is doubtful whether the increased yield would repay this. Bone meal or acid phosphate may be safely applied to the land a few weeks before planting as they both require time to become available.—Ed.

ROTATION OF CROPS—HEN HOUSE.

1. I have two fields in one of which corn was raised this year, in the other which has not been cultivated for several years. I put crimson clover and have a very good stand. I want to follow the clover with peas. Which would you advise, to follow the corn field for wheat and keep the clover

GET OUR 1908 CATALOG NEW STYLES—NEW PRICES THIS YEAR

Before you buy a Buggy—before you promise to buy a Buggy—before you look at Buggies—we'd like to send you our catalog of the celebrated made-to-order Split Hickory Vehicles—at prices that are sure to please you.

Our line is bigger than ever for 1908. We manufacture over 125 Styles of Vehicles—a Vehicle for every purpose. We sell direct from our factory to user—saving you at least 33 1/3 per cent from what you would have to pay for a stock buggy to a dealer.

\$37.50 and Up



SPLIT HICKORY

**VEHICLES Sold On
30 Days Free Trial
2 Years Guarantee**

We want to send you our catalog now. It's a catalog that will save you big money on any Buggy you want to buy—and it tells how we will make your buggy just as you want it made—individually for you—giving you a choice of colors, and a choice of trimmings and equipment—making you a buggy that you'll be proud to own—one that you can enjoy.

Our Big New Book for 1908 is now ready, showing complete line of Buggies—Surreys—Runabouts—Stanhopes—Phaetons—Driving Wagons, etc., also a full line of our celebrated Harness.

Let us send you this book at once, and save you 33 1/3%. We are the largest manufacturers in the world making Buggies to order and selling them direct from factory. We operate two large factories—one at Columbus, and the other at Cincinnati, Ohio. Address us at Columbus.

**THE OHIO CARRIAGE MANUFACTURING COMPANY, H. C. Phelps, Pres.,
Station 294, Columbus, Ohio**

This is the Celebrated Split Hickory Special—the most popular Vehicle on the American market. One Hundred Thousand of them in daily use.



**FROM FACTORY
TO CONSUMER**



FACTORY PRICE
\$50.00

FACTORY PRICE
\$52.50

COLUMBUS BUGGIES

THE STANDARD OF QUALITY EVERYWHERE

You should not fail to examine our famous line of Columbus Buggies, Runabouts, Driving Wagons, Surreys, Carriages, Phaetons, Stanhopes and a large variety of light Pleasure Vehicles which are now sold direct to Consumers at Factory Prices, saving you the Home Dealer's Profit of 20 to 60 per cent.

FREE COLUMBUS STYLE BOOK. Fully explains every detail of our celebrated Columbus Vehicles and our plan of selling direct from our Factory to you at Rock-Bottom prices. Every Vehicle sold on One Full Month Trial and guaranteed two years. We will furnish you with a vehicle of your own choice painted and trimmed just as you want it—properly proportioned and mechanically correct. Send at once for our free catalog, look it over—our low prices for Columbus, quality, style and workmanship will surprise you—write for free catalog today.

THE COLUMBUS CARRIAGE & HARNESS CO. 2026 So. High Street, Columbus, Ohio

Saves Six Times Its Cost In Just One Season!

The reason the dealers all over the South are selling Blount's "True Blue" Middle Breakers like hot cakes is simply because they save the Cotton and Corn Planters a whole lot of time and money. They are built strong enough to break any kind of ground, uplands or bottoms, sandy loam and stubble lands—yet are light enough for one mule. Their beams are short and you can plow right up to the end of the row. A small boy can do as much work with a

Blount's "True Blue" Middle Breaker

as a grown person with one of any other make. Easy to handle. It is the most compact, the strongest, easiest running "Middle Splitter" ever built. Made of best cast steel, with steel or wood beam, will last for years. **EXTRA POINT FREE.**

Send for my FREE BOOK

fully describing this remarkable Breaker. Read what the users of the "True Blue" say about its many points of superiority. Don't fool with a little "stock" or "scooter"—get a genuine "True Blue" and let it pay for itself six times the first season.

Address

HENRY F. BLOUNT, 1405 Main St., Evansville, Ind.

Light
Enough
for
ONE MULE,
STRONG
Enough
for TWO!

**Free
Extra Point**

field for corn in 1909, or put the wheat in the clover and pea field and next fall put crimson clover in the corn field. I have a field also that has not been in cultivation for several years to put in crimson clover. Is a fertilizer necessary? The soil is a stiff clay but not poor, yields readily to cultivation.

2. Also what is good to sprinkle in hen house to avoid frequent cleaning out.

SUBSCRIBER.

1. We would put the clover and pea field into wheat cutting the pea crop for hay as soon as ready and then cutting the pea stubble into the land with a disc harrow thus avoiding another plowing of the land. Plow and prepare the land well for the pea crop applying 200 or 300 pounds of acid phosphate per acre. The other field we would plant in peas and follow with crimson clover in the fall and then plant corn on the clover fallow in 1909. The other field which has not been in cultivation will probably grow crimson clover if well prepared without any fertilizer but a ton of lime to the acre would greatly help to insure a stand and put it in better order for subsequent crops. If the lime cannot be had you would perhaps do well to apply 200 or 300 pounds of acid phosphate per acre.

2. Plenty of dry road dust with some plaster sprinkled on it every few days is about the best thing to keep the henhouse from being offensive or smelling.—Ed.

CORN FODDER AND RUTABAGAS.

Will you kindly inform me whether or not fodder and rutabagas are injurious to milch cows? I've been informed by some that they are; by others that they are not.

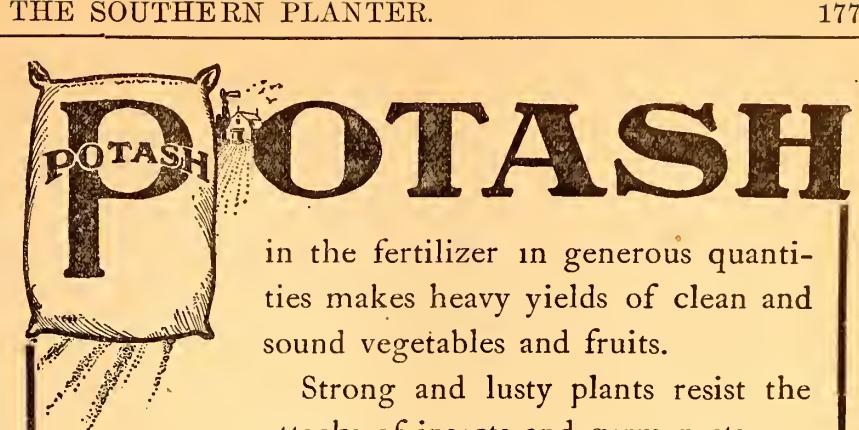
REV. W. E. LANKFORD.
Norfolk Co., Va.

Fodder and rutabagas are two most valuable feeds for milch cows. Only let the cows have sufficient of them and some grain with them and they will soon demonstrate their worth. We have fed over a bushel of rutabagas per day to cows for months together. They are the great staple crop for cattle feeding in England and Scotland and are largely fed in Canada and the more Northern States. They ought to be fed more freely here.—Ed.

CROP TO FOLLOW CABBAGE—FEEDING PIGS.

1. I have two acres of rich land that I have in cabbage. After I cut them the first of June, what will be the greatest money crop I can plant? Would celery pay best, or what? Give kind of fertilizer to use on what you recommend and kind of seed to plant.

2. I will have pigs born in February, about 15th, what will be the best feed



Strong and lusty plants resist the attacks of insects and germ pests.

Plenty of Potash in the fertilizer assures the best crops.

Our Book, "Potash in Agriculture," is *free* to farmers. May we send it to you? Address

GERMAN KALI WORKS, 93 Nassau Street, New York
Atlanta: 1224 Candler Building Chicago: Monadnock Building

It Cures Indigestion

A large per cent. of the American people are sufferers from Indigestion in some form. Irregular living, hasty and poor mastication, over-crowding the stomach with the luxuries of our fast life, soon have their effects.

But it can be cured, the pain driven away and the organs of the stomach restored to their normal condition.

The Natural Cure—Acid Iron Mineral

Goes directly to the seat of the trouble. It heals the inflamed, over-worked portions, purifies the blood, and restores and rebuilds the entire system. Why don't you try A. I. M.? If other remedies have failed, don't give up. Get a bottle of A. I. M from your druggist or general store. If your dealer hasn't it, send us \$1 for two large 50-cent bottles.

ACID IRON MINERAL CO.
RICHMOND, VIRGINIA.

to give them to make them good ones in two months?

T. G. P.

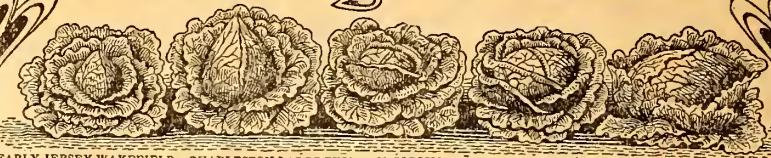
Halifax Co., Va.

If the land is a good, rich, sandy loam, it should produce celery after the cabbages come off, with the help of further manure or fertilizer. Celery is a gross feeding crop like cabbages, and the two following each other will require plenty of available plant food to make the crop a success. The production of celery by acre lots in this State is, however, quite a new proposition. Whilst we should like to see this done, and know no reason why it cannot be done if the land is properly prepared and made rich enough and if provision is made for irrigation in case of drought and if the plants are set at the right time and properly handled, yet we would not advise you to do more than experiment with a part of this lot with this crop at first. If the crop succeeds, it will no doubt pay to produce it, as the demand is great, it being shipped to the East and North from California and Florida and to the South by Michigan. In your section, the crop should be planted out in the fields in July or August and mature in November and December. The seed should be sown in June in moderately rich beds and the plants be pricked out as soon as they are large enough to handle to grow on until large enough to plant out in the field, which should be done in August. We will deal more fully with the subject in a later issue.

On the residue of the land not given up to the experiment with celery, a late Irish potato crop would probably be most profitable. This crop finds its best market in the further Southern States. There are growers in this State and adjoining ones who ship large quantities South every year and make a good price for them. The seed raised from this crop is always in demand by the truckers in Tidewater and Eastern North Carolina for the first early crop. It does better for that purpose than Northern-grown seed.

2. After the pigs are farrowed and the sow has come fairly to her milk, let her have good, generous feeding with shipstuff and corn meal, and she will then give the little pigs the best start in life, and upon this much depends their subsequent growth. When the little pigs are ten days or a fortnight old, make a way for them to get into an adjoining pen, where a small trough should be placed in which first begin to feed a little skimmed milk, and as the little pigs learn to drink this, gradually add a little shipstuff to the milk and get them eating this and they will thrive quickly. Scatter a little cracked corn and wheat in this pen after they have taken to eating freely. A little bone meal and a little blood meal fed once

W.M. C. GERATY The Cabbage Plant Man



EARLY JERSEY WAKEFIELD. CHARLESTON LARGE TYPE. SUCCESSION. AUGUSTA TRUCKER. SHORT STEMMED FLAT DUTCH.
The Earliest. Wakefield, The Earliest, Flat Head Variety. than Succession. Largest and Latest Cabbage.
Cabbage Grown. 24 Earliest.

TRADE MARK COPYRIGHTED

1868 Forty years Experience and Reputation. Fifteen Thousand Satisfied Customers. 1903
Our stock guaranteed to prove satisfactory or purchase price paid for same refunded. Thirty Thousand dollars Paid In Capital and our Reputation behind guarantee. Ask your Banker about us. Why purchase plants from unknown or inexperienced growers, taking the chance of losing your crop? when you can buy from the Original Cabbage Plant Grower, plants sure to produce satisfactory results.

PRICE: In lots of 1 to 5,000 at \$1.50 per thousand, 5 to 9,000 at \$1.25 per thousand, 10,000 and over at \$1.00 per thousand f. o. b. Young's Island, S. C. Our special Express Rate on Plants is very low. Our Cabbage Plants are Frost Proof. To produce the best results they should be set in the South Atlantic and Gulf States in December and January. In the Central States just as early in spring as land thaws sufficiently to get the plant root in the soil.

Send for our Catalogue; it contains valuable information about fruit and vegetable growing, home mixing of fertilizers, etc. We grow a full line of Strawberry plants, Fruit trees, and Ornamentals. Special terms to persons who make up club orders.

We are sowing this season six thousand pounds of cabbage seed.

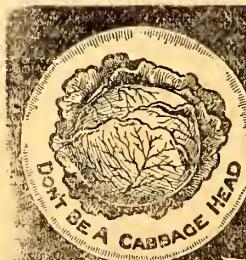
Wm. C. Geraty Co. Box 6 Young's Island, S. C.

PLANTS THAT WILL MAKE CABBAGE



Early Jersey Wakefield Charleston Large Type Wakefield Henderson's Succession Early Winning Statdt Early Summer
I am located on one of the Sea Islands of South Carolina, our climate is mild, just sufficient cold to harden and cause plants to stand severe freezing after setting out in the colder sections. I guarantee satisfaction or money refunded. Express rates to all points very low. Prices: 1,000 to 5,000 at \$1.50; 5,000 to 9,000 at \$1.25; 10,000 and over at \$1.00. Special prices on large lots. Send your orders to

F. W. TOWLES, Pioneer Plant Grower
Telegraph Office, Young's Island, S. C. Martin's Point, S. C. Long Distance Phone, Martin's Point, S. C.



HAVE YOU BEEN TO JAMESTOWN

If so, you no doubt received free, one of these buttons from the S. C. exhib. given you by the N. H. Blitch Co., the largest Vegetable and Plant farm combined in the world. We will be glad to have your orders for cabbage and garden plants of all kind, raised in the open air. Special express rates. Prices as follows:—1,000 to 5,000 at \$1.50 per 1,000; 5,000 to 10,000 at \$1.25 per 1,000; over 10,000 at \$1.00 per 1,000, f. o. b. express office Meggett, S. C. We guarantee count, make good all bona-fide shortage, and give prompt shipments. All seeds purchased from the most reliable Seedsmen, guaranteed true to type. We have extra early or large type Wakefield, the Henderson succession and flat Dutch varieties of cabbage plants. Send all orders to N. H. BLITCH CO., Meggett, S. C.

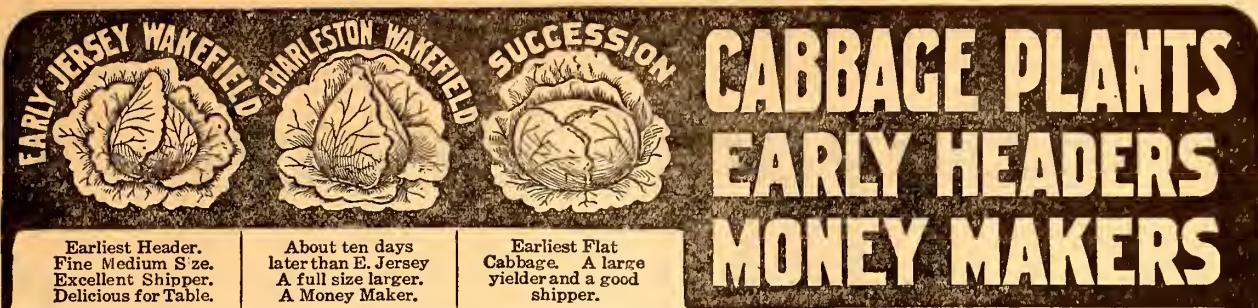
LARGEST PLANT & TRUCK GROWERS ON EARTH

HEADED CABBAGE IN APRIL

you can have by planting the James Ray Geraty Company's Frost-Proof Cabbage Plants. Guaranteed to stand 18 above zero without injury. Four hundred plants, express charges prepaid on Southern Express Company's lines, for \$1. Market gardeners in Tennessee and Kentucky are buying in orders ranging from 500,000 and 1,000,000 at a time.

WRITE JAMES RAY GERATY COMPANY,
Telegraph Office, Youngs Island, S. C.

P. O. Adams Run, S. C.



THESE THREE FAMOUS varieties have made *Fortunes* for those who have stuck to them. They are the result of life times of study and experiments of the oldest and most reliable *Cabbage Seed Growers* in the World. We have plants and plenty of them *Grown From These Seed* in the open field, which will stand *Severe Cold* without injury, and if you want enough for a square in your garden, or for one, five or ten acres for market, you can't do better than to order them from us. We *Guarantee* full count and satisfaction or *Money Refunded*. All orders filled promptly, weather conditions permitting. It is cheaper for you and better for us to let your money accompany order, otherwise Plants will be shipped C. O. D. and you will have to pay return charges on the money.

Prices f. o. b. Young's Island, 500 for \$1.00. 1 to 4,000 at \$1.50 per 1,000. 5 to 8,000 at \$1.25 per 1,000. 9 to 20,000 at \$1.00 per 1,000. Special prices on larger quantities. Packed in light, strong, well ventilated boxes. Cheap Express rates. Folder on *Cabbage Culture* by C. M. Gibson, mailed free on application. Write your name and shipping address plain, and send your orders to

C. M. GIBSON, Young's Island, South Carolina

or twice a week will also help them. Keep them clean, dry and warm.—Ed.

HAIRY VETCH.

I have been hearing quite a lot lately of hairy or winter vetch and hope you will have some articles on its culture during the spring and summer in time to inform us about the proper time and manner to sow it. I am anxious to get something for fall, winter and early spring grazing for hogs especially: Professor Massey's articles are especially good.

Nottoway Co., Va. W. E. COOK.

In our fall issues we always bring this subject of seeding winter or hairy vetch to the attention of our readers, as that is the proper time to prepare the land and seed the crop. The hairy vetch succeeds better than the winter vetch usually in the South, and it may be seeded from August to the end of October. It should be sown in mixture with oats or oats, wheat and rye at the rate of twenty-five or thirty pounds of the vetch seed and three pecks of the grain mixture to the acre. It makes a good spring grazing crop and can be cut for hay in May or June. It has been tried as a spring crop sown in February and March and has, in some instances, succeeded well, but the fall is the proper time to sow it in the South.—Ed.

BREAKING COLT OF KICKING— CORN FERTILIZER.

1. Will you please tell me which is the best way to break a colt from kicking and screaming when currying?

2. Which is the best fertilizer for corn? ALLEN C. FOWLER.

Campbell Co., Va.

1. The only way to break a colt or any other young animal of a bad habit

TREES.

First Class Nursery Stock
of all kinds.

WHOLESALE
AND
RETAIL.

We make a specialty of handling dealers' orders.

ALL STOCK TRUE TO NAME.

Apples,	Nectarines,	Pecans,	Ornamental and
Pears,	Cherry,	Chestnuts,	Shade Trees,
Peach,	Quince,	Walnuts,	Evergreens,
Plum,	Almonds,	Small Fruits,	Roses, Etc.
Apricots,			

CALIFORNIA PRIVET, for Hedging.

WRITE FOR CATALOGUE.

... AGENTS WANTED. . .

FRANKLIN DAVIS NURSERY CO., Baltimore, Md.

SEEDS AT ONE-HALF CITY SEEDSMEN PRICES

Let us send you our catalog of seeds—It's different. It tells you facts and why we can save you money and gives you a guaranteed *square deal*. Just drop a postal 10-day and see the difference in buying your seed in the country or city.

FORREST SEED CO., Box 11, Cortland, N. Y.

SEED CORN 146 BU. ACRE

DIAMOND JOE'S BIG WHITE—A strictly new variety. None like it. It is the Earliest and Best Big White Corn in the world—because it was bred for most big bushes, not fancy show points; because grown from thoroughbred inherited stock; every stalk bears one or more good ears—because scientifically handled, thoroughly dried and properly cured and had the most rigid examination. Big Seed Catalogue FREE. It tells about all best farm, grass, garden and flower seed grown. Send for it to-day. Address

RATEKIN'S SEED HOUSE, SHENANDOAH, IOWA.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

1880

Savage Seeds

1908

We Sell
 Clover,
 Timothy,
 Herbs Grass,
 Alfalfa,
 Alyke,

German Clover,
 Ky. Blue Grass,
 Tall M. Oat Grass,
 Seed Oats,

of all kinds
 Seed Potatoes,
 Onion Sets,

Peas,
 Beans
 And

All Other
 Field Seeds,
 Also Sell

Grain,
 Hay, Straw,
 And Mill Feed.

We sell the purest and best Seed Grain and Grass Seed grown in this country. Guarantee quality as good and prices as reasonable as any other house in the trade. Write for prices.
 We are also large buyers of Home-Grown Seed Grain and Grass Seeds. Send samples and we will make you offer delivered at your railroad station.

N. R. SAVAGE & SON :: RICHMOND, VIRGINIA

is to exercise patience with it. Be kind to them, handle them frequently, and teach them to have confidence in you. Let them see that you do not intend to hurt them nor to tease them and they will soon understand you and conform to your orders. Harsh treatment only results in worse behaviour and ineradicable vice. The colt may have a very tender skin and therefore suffer from the use of a coarse curry comb. Use one with fine teeth or use a strong brush and see whether this does not help you.

2. Read the articles on the corn crop which we have published in the last three of our issues. They will give you the information you want and teach you how to make a good crop of corn. Thorough preparation of the land has more to do with the yield of corn than any fertilizer you may use.—Ed.

TOBACCO GROWING.

Do you recommend flat cultivation for tobacco? I think in Tennessee and Kentucky they seem to prefer the flat cultivation of the weed. I have followed a red lot for tobacco with much broom sedge on the same. I covered the straw by the use of a chain. I would thank you very much to tell me of the best way to manage this land in order to get rid of the broom sedge. This is a very close piece of land and should have been subsoiled when broken, but I could not do so. If I should re-fallow the land in February and then subsoil, would that cause the broom sedge to be any longer in decaying? If I re-fallow the land I will use a two-horse plow.

Brunswick Co., Va. T. E. KIRK.

We are in favor of level cultivation for all crops in the South, except on wet land or in the case of early Irish potatoes, where the crop is to

**W. T. HOOD & CO.,
 OLD DOMINION NURSERIES,
 RICHMOND, VIRGINIA.**

WHOLESALE AND RETAIL GROWERS OF

High Grade Nursery Stock

Descriptive catalogue and price list on application.

Office: Chamberlayne and Rennie Ave. Nurseries: Henrico and Hanover Counties.

.. ELMWOOD NURSERIES ..

—We are Growers and Offer a Fine Assortment of—

APPLES,
 CHERRIES,
 NECTARINES,
 GOOSEBERRIES,
 RASPBERRIES,
 ORNAMENTALS,

PEACHES,
 PLUMS
 GRAPE VINES,
 STRAWBERRIES,
 ASPARAGUS,
 SHADE TREES,

PEARS,
 APRICOTS,
 Currants,
 DEWBERRIES,
 HORSERADISH,
 HEDGE PLANTS.

WRITE FOR CATALOGUE.

J. B. WATKINS & BRO., Midlothian, Va.

**CAMBRIDGE
 REVERSIBLE SULKY PLOW**

For Hill-Side and Level Land

Will do equally good work on level land or hill-side; no ridges or dead furrows; lighter draft than a hand plow doing same work; power lift for raising plows; adjustable pole does away with all side strain and regulates width of furrow; extra heavy improved steel wheels with dust cap and removable chilled boxes. Constructed to meet the growing demand for a riding plow that will do the work without leaving the land in ridges or dead furrows. Successfully operated by anyone who can drive a team. The Reversible Sulky Plow is a labor-saver and a money-maker to the farmer, fully described in a circular which we will send free, at the same time we will send our catalog describing "The Lovejoy Line" of Farm Tools. If we have no dealer near you we want to make you a Special Price Proposition that will save you money.

THE LOVEJOY CO., 706 FOUNDRY STREET, CAMBRIDGE, N. Y.

mature before the hot weather sets in. In order to secure this maturity on a crop planted in cold land early in the season, it is advisable to throw the land into ridges and thus expose more of the land over the sets to the warming rays of the sun. Tobacco grows in the hottest season of the year and, therefore, does not need this ridging to be done. Level cultivation induces a wider spread root growth and hence a greater feeding area for the plants. In the case of broom sedge land, we would re-fallow as soon as possible, crossing the former ploughing and at the same time subsoiling the land. The follow with a disc cultivator, cutting the sod as much as possible. This will help to get rid of the broom sedge by breaking the sod to pieces and causing it to be more quickly acted upon by the action of the sun, air and moisture.—Ed.

DE HORNING PEN—GRAFTING
APPLE TREES.

1. Kindly give a diagram in February issue of Planter of a suitable and convenient frame in which to dehorn cattle with dehorning clippers.

2. Also, some instructions as to how to graft apple trees.

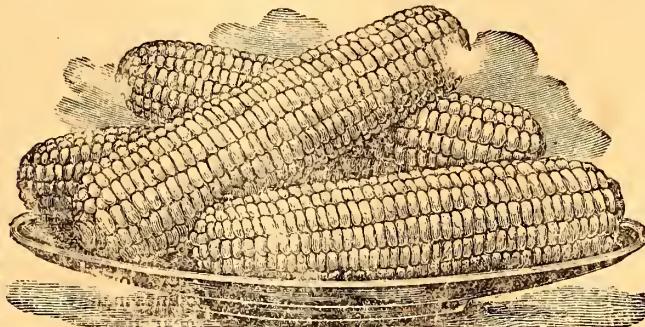
SUBSCRIBER.

Botetourt Co., Va.

1. A dehorning pen is made by setting four strong posts in the ground just wide enough apart to allow a cow or steer to stand between the two end posts and long enough to allow the animal to come within the posts lengthwise. Then place two strong rails on each side and across one end, spiking these very firmly to the posts, especially the two end ones. These two rails at the end should be just wide enough apart to let the animal put its head between them. When the head is in this position, make the animal fast to one of the end posts, fastening it tightly to the post. Then take a pair of nippers and put into the nostrils and pull the head against the post, thus twisting it to one side. The animal can then be dehorned without being able to resist. The simplest dehorning pen we ever saw was made

Thorburn's Seeds

Over 105 Years in Business in New York City



TWO GRAND
PRIZES

Louisiana Purchase
Exposition 1904

GOLD MEDAL

Paris Exposition
1900

GOLD MEDAL

Pan-American
Exposition 1901

Aside from the excellence of OUR CATALOGUE and its artistic merit, and the fact that it contains the largest assortment of high-class seeds of any garden annual published, it is invaluable either to the amateur or professional gardener as a guide to horticulture, and will be found indispensable.

Our SEED CATALOGUE, ready January 1.
Our BULB CATALOGUE, ready August 15.
WE MAIL THEM FREE.

J. M. THORBURN & CO.

(Late of 36 Cortlandt Street.)

33 Barclay Street, through to 38 Park Place
New York

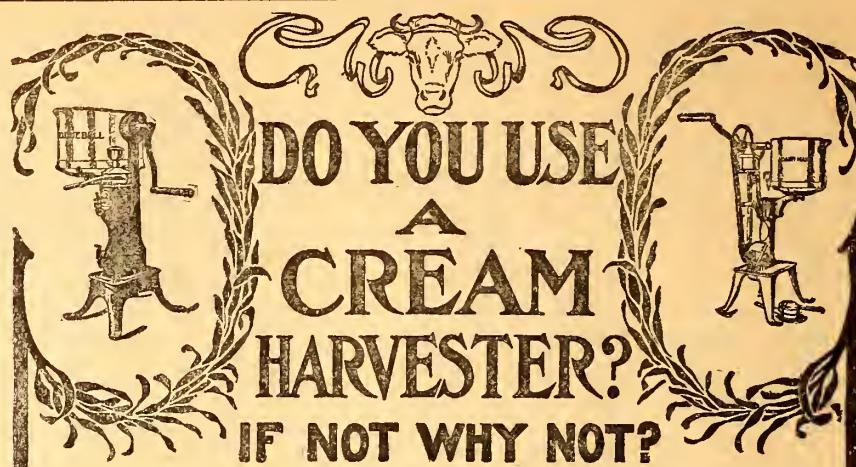
00000

SEED

Winter, Spring, Burt and Rust-
Proof Oats, Potatoes, Peas, Soja
Beans, Cane, Kaffir Corn, Millets,
Poultry Supplies, Dairy Feeds, etc.,
Clover and Grass Seed.

by making the pen on each side of an oak tree which had grown a fork just at the right height for the head of the animal to go into the fork. When the head was fastened to this tree and pulled on one side with the nippers, there was no giving way when the dehorning was done.

2. Grafting may be done in several ways, but the simplest form is cleft grafting. There are two chief requisites for success. The first, that the graft be so set in the stock that the sap may flow upwards without interruption, and the second that the forming wood may extend downwards uninterruptedly through the inner bark. To effect these two requirements, it is needful, first, that the operation be performed with a sharp knife that the vessels and pores may be cut smoothly and evenly and the two parts be brought into immediate and even contact. Secondly, that the operation be so contrived that a permanent and considerable pressure be applied to keep all parts of these cut faces closely together. Thirdly, that the line of division between the inner bark and the wood should coincide or exactly correspond in each and, fourthly, that the wounded parts made by the operation be effectually excluded from the external air chiefly to retain a due quantity of moisture in the graft, but also to exclude the wet until, by the growth of the graft, the union is effected. The first requisite is best attained by keeping a keen, flat bladed knife to cut the faces and another knife for other purposes. The second requires that the jaws of the stock in cleft grafting press with some force, but not too much, against the wedge shaped sides of the graft. A stock one-third of an inch in diameter will sometimes do this sufficiently, but three-quarters of an inch is a more convenient size. The third requisite is attained by close examination with the eye. The fourth is accomplished by plasters of grafting wax or by the application of grafting clay. Grafting wax may be made by melting together rosin, tallow and bees' wax. An excellent grafting wax is made of three parts of rosin, three parts of bees' wax, and two of tallow. The wax may be applied directly when just warm enough to run by means of a brush, or it may be spread on muslin and then be cut into strips and these be applied closely around the inserted graft. In cleft grafting the stock should be cut off square and then be split with an iron wedge. The scion or graft is then cut in wedge form to fit in the cleft. The wedge is then withdrawn and the graft inserted, being careful to comply with the requirements as to the close fitting and position of the inner bark of the stock and graft. The shoulder of the stock should then be sloped off and the graft is then ready for the application of the grafting wax.—Ed.



IT enables you to get every particle of butter fat from the milk. You can't get it by hand skimming.

You will have fresh, warm, sweet skim-milk for calves and pigs—a most excellent feed. When you skim by hand, the milk is cold and stale.

It saves work. You have no idea how much drudgery a cream harvester will save if you have never used one.

You want your dairy products to be of the highest grade. Everywhere it is the cream harvester users who make the prize products. That's another good reason why you should use one.

The International Harvester Company of America offers you a choice of two of the best machines manufactured.

The Bluebell, a gear drive machine and the Dairymaid, a chain drive machine, are both simple, clean skimmers

easy running, easily cleaned and are built to cause the least possible trouble in operation.

You should be satisfied with nothing but the best separator you can buy. The I. H. C. cream harvesters are designed and manufactured to be as nearly perfect working machines as possible.

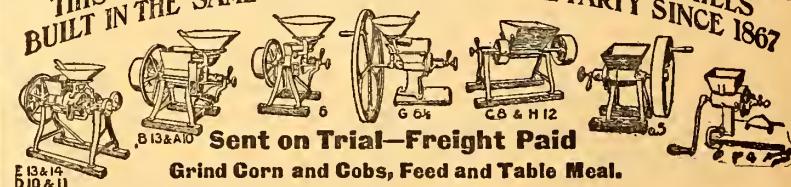
Both have stood the hardest tests ever given any cream separator. Every machine is given a thorough factory test before it goes out. There is no possibility of your getting an I. H. C. cream harvester that is not right working.

International local agents can supply you with catalogs, hangers and full particulars. Call and take the matter up with them, or write the Home Office. You will be interested in seeing a copy of booklet on the "Development of the Cream Separator" which will be mailed on request.

International Harvester Company of America, Chicago, U.S.A.
(Incorporated)

Write For **FREE BOOK** Now—Today

EST. 1867 INC. 1902
10 SIZES, 22 STYLES HAND TO 20 HORSE POWER
THIS IS THE QUAKER CITY FAMILY OF GRINDING MILLS
BUILT IN THE SAME PLACE AND BY THE SAME PARTY SINCE 1867

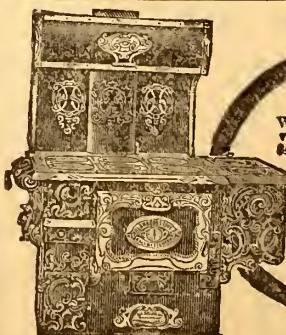


Sent on Trial—Freight Paid

Grind Corn and Cobs, Feed and Table Meal.

10 lbs. to 70 bushels per hour; ball bearing; easy running. Shipped from Philadelphia or Chicago. Send for free catalogue to

THE A. W. STRAUB CO., 3737-39-41 Filbert Street, Philadelphia, Pa.



"A Kalamazoo Direct to You"

We have more than 100,000 satisfied customers in more than 17,000 cities, villages and towns in the United States who have each saved from \$5 to \$40 by buying a Kalamazoo stove or range on

360 DAYS APPROVAL

direct from our factory at actual factory prices. No stove or range has a higher reputation or gives better satisfaction. You run no risk. You save all dealers' profits. We pay the freight.

Send Postal Catalog No. 400

and see list of towns where we have satisfied customers.

Kalamazoo Stove Company, Mrs., Kalamazoo, Mich.

Our patent oven thermometer makes baking and roasting easy.



WILL IT PAY YOU TO BUY A TUBULAR?



THE best way to determine this question is to get out your pencil and do a little figuring.

You don't need to be an expert mathematician to figure this problem. In fact, to make it easier, we'll figure it for you and in such a way that you can easily see it in your own case.

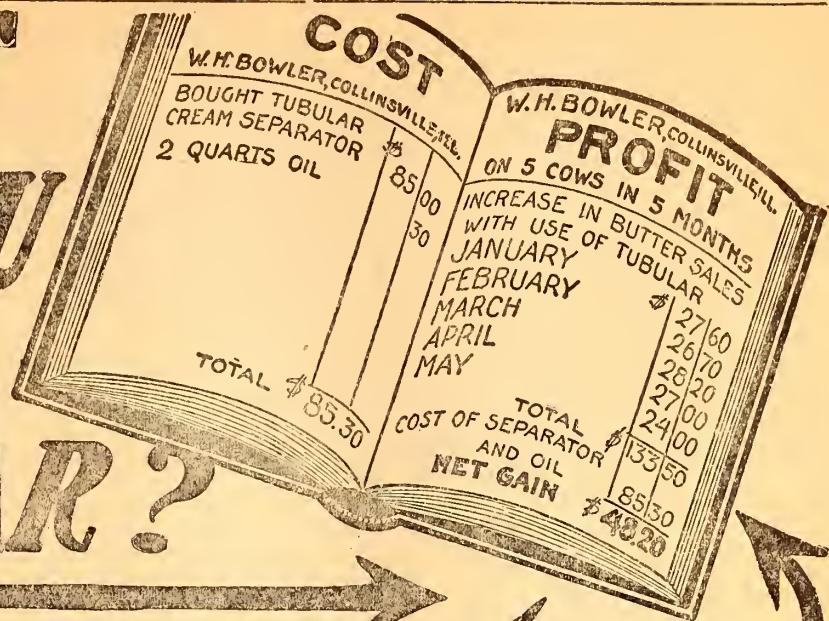
If you are milking five average cows, not using a Tubular, you lose \$5 to \$6 a month—leaving butter fat in the milk, which a Tubular would get out. Then the better your cows the larger your loss—up to three or four times as much.

In a few months you would have made enough extra money out of this extra cream which you are now wasting—losing—to pay for a Tubular. Here's actual proof. Read what Mr. W. H. Bowler gained on his 5 cows by using a Tubular.

COLLINSVILLE, ILL.

"From five good Jersey cows while using the water separator we made from twenty-three to twenty-four pounds of butter a week; with one of your Separators from the same cows we made from forty-three to forty-seven pounds a week. I think it would take about \$1000 to buy my Tubular if I couldn't get another."

W. H. BOWLER.



MOUNT AIRY, Md.

I am milking five cows. The increase of revenue, over the water can I was using, will pay the cost of the Tubular inside of one year. I think the Sharples Tubular far superior to any other separator.

EMORY PURDUM.

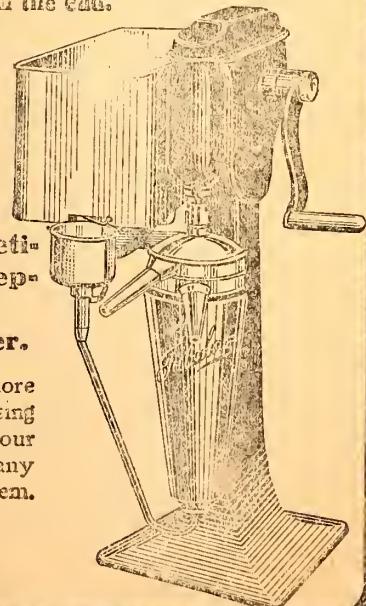
It is not a question any longer, whether it will pay you to buy a Separator—the fact is, you can't afford to do without one. Now the all important question is, which separator to buy?

Too many people have made the mistake of buying a low-priced separator only to find that instead of saving money on their purchase—they have wasted it entirely. Don't do this. Get the best at first—a Tubular—it's cheapest in the end.

Here are the reasons:
 It skims closest. Has fewest parts. Easiest to clean. Low supply can saves your back. Turns easiest—is frictionless ball bearings. Wins in every competitive test. Made in largest Cream Separator Factory in the world.
 More sold each year than any other.

Send for our new catalog No. 290 it's full of more good reasons and proofs from those who are using them. It's free—we'll also send a copy of our book "Business Dairying" which will help any one keeping cows to get more, profit from them. It's worth a dollar of any farmer's money.

THE SHARPLES SEPARATOR CO.,
 Chicago, Ill. West Chester, Pa. Toronto, Can.



ICE HOUSE.

Will you please give me a good plan or the address of some one that can of an ice house above eground?

C. R. SANDERSON.

Cumberland Co., Va.

An ice house above ground is simply one house within another with a space between the inner and outer walls of twelve or fifteen inches filled in with sawdust or some other non-conductor like mineral wool. This double wall should be continued in the roof and there should be good provision for ventilation in the roof. The door should also be made double and packed like the walls. A drain should be run into the centre of the floor and this should be trapped outside with a bent pipe to prevent the inflow of air. Let the floor slope to the drain and place poles on the floor to keep the ice dry.—Ed.

CURING SKINS.

Please publish in your next issue of the Southern Planter a formula for tanning a sheep and a wildcat skin with the wool on.

J. M. SPRINGMAN.

Stretch the skins tightly on a board and scrape all the flesh and fat from them and then rub with powdered alum and work this well into the skin. When the first rubbing has been absorbed, rub again once or twice at intervals of a few days, and then loose them from the board and work with the hands until soft and pliable.—Ed.

SAWDUST—WHITEWASH.

I wish to ask you if sawdust from old field pine would be of any service to land and how much should be used per acre. The sawdust has been sawed at least eight years, and is somewhat decomposed now. Will it damage the barn yard manure to use it in stables for bedding?

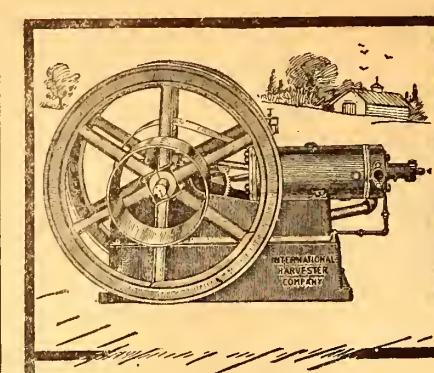
I also wish to ask if a white-washing with lime would preserve outbuildings and how long would one coat last. Cabarrus Co. N. C. G. M. CRESS.

There is very little plant food in sawdust. It is scarcely worth the cost of hauling except as an absorbent of the liquid manure, for which purpose it may be used in the stables. It will help to lighten heavy land and add some little vegetable matter to the soil. It may be used for this purpose freely without risk of injury.

Lime washing buildings helps to preserve them from the action of the weather. They should be whitewashed outside every two years at least, and internally every year.—Ed.

VETCH S E E D I N G—C O R N FERTILIZER.

1. I have a piece of new land that has been cleared two years, but has not been cropped. I expect to put in



A Reliable Power as a Farm Help

established a new order of things.

Any one who will carefully consider the matter must see that they are money makers and money savers.

They make short, easy, pleasant work of what always has been hard, slow work.

They save the farmer's strength, save him wages of hired men, save time, and enable him to do more work and make more money out of his farm than ever was possible before.

There is no doubt that on the average farm an I. H. C. gasoline engine will more than repay its first cost each year.

The nice adaptation of these engines to all farm duties is one of their most excellent features.

They are built in—

VERTICAL, 2 and 3-Horse Power.—HORIZONTAL (Stationary and Portable), 4, 6, 8, 10, 12, 15 and 20-Horse Power.

TRACTION, 10, 12, 15 and 20 Horse Power.

AIR COOLED, 1-Horse Power.

Also sawing, spraying and pumping outfits.

There is an I. H. C. engine for every purpose.

It will be to your interest to investigate these dependable, efficient engines. Call on the International local agent and get catalogues and particulars, or write the home office.

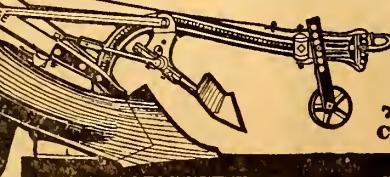
INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.
(Incorporated)

AMBRIDGE STEEL PLOWS

These
Splendid
Steel Plows

are the product of a pioneer plow maker. The perfected result of 62 years devoted to constant endeavor to produce the "ideal plow." Constructed along the most advanced lines, handsomely finished, durably built, trim in appearance, compact in design, they appeal with especial force to the expert plowman who appreciates the solid worth of a really good plow. Note the high throat, long steel landside, long trim point and compact appearance—these are but a few of the points that appeal to the true farmer—Cambridge Plows have all the others. They are light in weight and draft—easy on man and team, and are built strong for long life and hard service; but it's in their working qualities where they surpass all competitors—it's their ability to make dollars for the farmer that makes them favorites. Our No. 29 Cambridge Steel Plows with Automatic Steel Jointer, Shifting Clevis and Wheel—Automatic Coulter when desired—is reversible for flat land or hillside work. It's a wonder. In our complete line is a plow for every soil, for every locality, and they are all described in detail in our handsome free catalog, which also describes the complete "Lovejoy Line" of Farm Tools. Tools that help the farmer get better crops—that lighten farm labors and reduce the repair bills—Lovejoy Tools are money-savers, money-makers for the farmer. Don't buy until you get the catalog. Write for it today. If we have no dealer in your town we want to make you "A Special Price Proposition" that will save you some money on your farm tools.

THE
PRODUCT
OF A
PIONEER
PLOW
MAKER



62
YEARS
EXPERIENCE
BACK OF THEM

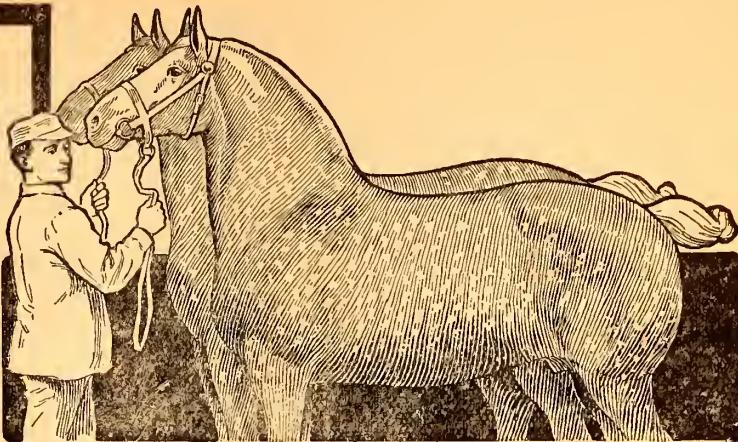
THE
LOVEJOY
COMPANY

706 Foundry St.,
Cambridge, N. Y.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

What Horses Need

Conditioning horses for market requires skill in feeding. The stomach of the horse is not suited to the consumption of as much rough fodder as is that of the ox. The ration for the horse then, must be more concentrated—largely grains. But food itself is not more important than is a proper distribution of food after it's eaten. Thus digestion becomes the function to which we look for all satisfactory growth and fattening. Now long-continued heavy feeding may bring stomach derangement, dropsical swellings or even colic. Hence the horse needs a tonic to assist and perfect the digestive process.



DR HESS STOCK FOOD

The prescription of Dr. Hess (M.D., D.V.S.) possesses remarkable tonic properties for either horses, cattle, hogs or sheep. It assists digestion, thus making a greater amount of food available for building bone and muscle or for forming milk and fat. Besides it increases the appetite for roughage. Chemical analysis shows that there is less nutrition lost in the manure when Dr. Hess Stock Food is fed, which proves that more of the food is digested. The ingredients contained in Dr. Hess Stock Food are recommended by the ablest medical writers for improving digestion, purifying the blood, expelling waste material from the system and regulating the bowels.

Sold on a Written Guarantee

100 lbs. \$5.00; 25 lb. pail \$1.60 } Except in Canada
Smaller quantities at a slight advance. and Extreme
West and South

Where Dr. Hess Stock Food differs in particular is in the dose—it's small and fed but twice a day, which proves it has the most digestive strength to the pound. Our Government recognizes Dr. Hess Stock Food as a medicinal compound, and this paper is back of the guarantee.

Free from the 1st to 10th of each month—Dr. Hess (M.D., D.V.S.) will prescribe for your ailing animals. You can have his 96-page Veterinary Book free any time for the asking. Mention this paper.

DR. HESS & CLARK, Ashland, Ohio.

Also Manufacturers of Dr. Hess Poultry Pan-a-cea and Instant Louse Killer.

INSTANT LOUSE KILLER KILLS LICE.

corn in spring. Could I get corn off in time to sow vetch, and would it be advisable to sow rye with it?

2. I also have fifteen acres of rather thin land I expect to put in corn. It has a timothy sod mowed one year. It is limestone land, light clay with heavy clay subsoil. I expect to put three hundred pounds of fertilizer per acre. What would be best for this with the least cost?

SUBSCRIBER.

Augusta Co., Va.

1. Your corn crop should come off in ample time to allow you to sow vetch. This crop can be seeded as late as October and do well. Some grain should always be sown with vetch. We prefer to sow a mixture of wheat and oats with it, say, twenty-five pounds of vetch seed and three pecks of the grain mixture per acre.

2. Apply 250 pounds of acid phosphate per acre. What this land probably needs more than anything else is more vegetable matter in the soil. Sow peas and crimson clover in the corn at the last working and then turn this crop into the land in the spring. —Ed.

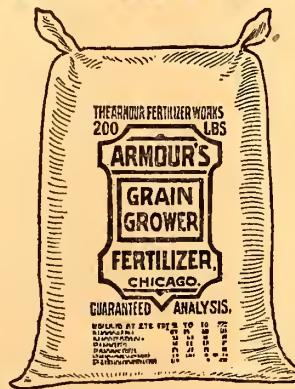
ANIMAL MATTER FERTILIZERS

BONE, BLOOD
AND
POTASH;

HIGH-GRADE
POTATO;

TOBACCO SPECIAL;

ALL SOLUBLE;



WHEAT, CORN
AND
OAT SPECIAL;

FRUIT AND ROOT
CROP;

SPECIAL TRUCKER;
GOLD MEDAL.

THE ARMOUR FERTILIZER WORKS
BALTIMORE, MD. **CHICAGO, ILL.** **BUENA VISTA, VA.**

LONG ISLAND ASPARAGUS.

The Asparagus for which Long Island is famous is the FRENCH ARGENTÉEUIL strain modified by local influences of soil and climate. Three-Year-Old Roots of this well-tried, superior variety, \$1.00 per 100; 40 for 50 cents. Directions for cultivation by the Long Island Method sent with each order. Send to-day for our 1908 Catalogue, which contains our \$45.00 FREE prize offers.

BINGHAMTON SEED COMPANY, 103 Court Street, Binghamton, N. Y.

CORN TO PLANT.

I have a piece of very light land bordering on a creek with very good fertility. The land makes a very good growth of corn, but it does not mature good. The August rains prevented it from doing so. What kind of corn would you advise me to plant that will mature early? How would yellow corn do by planting very early, or what kind would you advise me to plant?

GEORGE R. HATCH.

Prince George Co., Va.

On land such as you describe in your section any good variety of corn should mature in our long, fine falls. The fault is that land is too rich in nitrogenous matter and lacks the mineral plant food to balance this. Apply 200 pounds of acid phosphate per acre. This will balance the plant food and cause better maturity. Yellow corn will mature quicker than the white and can be planted much later. We have known Golden Dent to mature well in this county planted on the fourth of July, or even a week later.—Ed.

WOOD ASHES—TOBACCO STALKS.

Will you please tell me in your February issue what per cent. of potash wood ashes contain and in what form also, tobacco stalk.

I would like to know what form of potash there is in ashes, as ashes seem to be the thing to make fine clover. I like The Planter fine as a farm magazine.

J. H. PERRY.

Unleached wood ashes contain 5.25 per cent. of potash and 34 per cent. of lime. The lime content has probably as much or more influence in promoting the growth of clover as the potash. The mere application of potash in any form alone will not ensure a growth of clover like lime will. The lime corrects the acidity of the soil. Clover will not grow in acid land whatever fertilizer be applied. The bacteria which are essential to the growth of all the leguminous plants cannot exist or multiply in land even slightly acid. Tobacco stalks contain 5.02 per cent of potash and 2.22 per cent. of lime.—Ed.

ENRICHING MANURE.

Please inform me what to balance my manure with to be used under corn on bottom land. The manure is being made from cattle in stalls thrown into a large shed and trampled down and kept dry. The cattle are being fed on pea stover and cotton seed meal.

A SUBSCRIBER.

Iredell Co., N. C.

Read the article in this issue on "Increasing the Value of Farm Yard Manure." You should use forty pounds of acid phosphate per ton of the manure applied. Farm yard manure is rich in nitrogenous matter, but lacks



MANSON CAMPBELL,
President,
The Manson Campbell
Company, Ltd.

Let My 50 Years Success Start You Right for Poultry Profits

Whether you are an expert Poultry Raiser, or a Beginner, it will pay you, especially this year, to write me a postal for my **New Free 1908 Chatham Incubator and Brooder Book** on Poultry Science.

My 50 years of practical experience in building Chatham Incubators and Brooders is told fully in this book. I tell you how you can start in the poultry business with a small amount of money and offer to prove to you on 5 years' guarantee that my machines are the best made. My 1908 book is so full of the latest improvements in chicken raising methods and practical information that no Expert or Beginner can afford to overlook it.

Take 84 Days Free Trial of My Chatham Incubator

If you are an Expert, set a Chatham beside any other incubator in the world and prove at my risk for 84 days on 3 hatches that Chathams beat the rest.

If you are a Beginner, just hold off a day or two until you get my low factory prices direct to you—freight prepaid—and read my 1908 Book before you buy. Write a postal to me personally, now, to get it.

Learn all about our two immense factories—our new improvements and our ways of testing every machine at our own experimental station.

When a Chatham Incubator or Brooder leaves our factory to go to you it carries 50 years of successful experience with it and is an assurance of your success.

New, Free Chatham Poultry Book

It tells you how our \$500,000 invested in the Incubator manufacturing business is really an investment back of every one of our thousands of customers to make them Successful Poultry Raisers from the time they start with Chathams.

Write me personally, today, for my New Book.
Manson Campbell, Pres., The Manson Campbell Co., Ltd.
166 Wesson Ave., Detroit, Mich.
Dept. 59 Kansas City, St. Paul, Portland, Ore., Nashville, Tenn., Harrisburg, Pa.
We have 24 Branch Houses and Make Prompt Shipments.



**Freight
Prepaid**

**Direct From
Factory
Price**

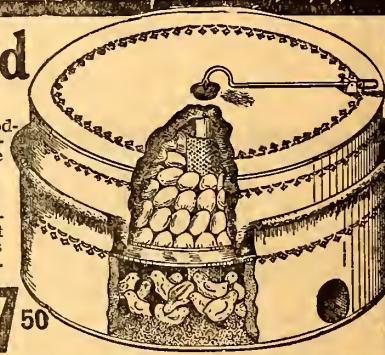
Hatch and Brood AT SAME TIME

Here's a new thing—a complete hatcher and brooder, one machine that performs both of these operations at the same time and does both well. The

METAL MOTHER Brooder-Hatcher

is a long step ahead of all others—the most remarkable invention in the poultry world. With it 2 qts. of oil hatches 50 eggs and broods the chicks—brood one batch while you make another hatch. Our nest system enables you to do this. A time-saving, labor-saving, oil-saving machine \$7.50. Complete catalog—tells how it works. Regular Cycle Hatchers and Brooders at \$5 each are great favorites. Write today.

CYCLE HATCHER CO., 409 Wm. St. ELMIRA, NEW YORK



750

Guaranteed GARDEN TOOLS



No. 6. The newest Planet Jr. Combination Hill and Drill Seeder, Wheel Hoe Cultivator and Plow. Adapts itself to almost every kind of seed-planting and crop-cultivation, and is invaluable all through the season.

No. 12 Double Wheel Hoe, Wheels adjustable from 4 to 11 inches apart, and the tool works equally well astride or between rows. A thorough weeder, a capital cultivator, a neat furrower, coverer, and garden plow.

Planet Jr Tools are so strongly and carefully made that we never hesitate to give a broad full guarantee. You run no risk. More than a million farmers and gardeners are now enthusiastic Planet Jr users.

Planet Jrs are invented and made by a practical farmer and experienced manufacturer. They do the work of three to six men without them—save time, labor, seed, and give better results.

Write today for our 1908 catalogue of Seeders, Wheel-Hoes, Cultivators, etc.—45 kinds—a tool for every gardener's need.

S L
Allen & Co.

Box 1107 x
Phila., Pa.

The Greatest Offer of the Season

Here is the biggest Incubator Bargain offered the poultry-raiser this season. An opportunity to get a high-grade, standard 100-egg machine at a money-saving price that will interest every incubator buyer in the land. For \$12.50 we will ship complete a regular No. 48 Model, 100-egg "United" Special Incubator, and pay the freight to any point east of the Mississippi River, or we allow amount of freight to River on orders west of the River. Don't compare this offer with the price asked

for machines made in box factories and called "incubators." This is the special "United" Machine, with all its latest improvements; made in the finest specially equipped incubator factory in the country, by expert incubator builders; double-cased, lined with Lone Star Roofing and wool packing, with heavy sheet of asbestos paper covering radiator and fitted with the celebrated "United" heating system—the best ever put in an incubator. Machine will be securely packed and shipped complete with lamp, thermometer, egg-tester—everything ready to fill the lamp, put in the eggs and start it to hatching. Send us your order for one today, enclose draft or money order for \$12.50, or send for catalog if you want to know more about the machine before you buy. Be sure and write today.



United Incubator & Poultry Supply Mfg. Co.,

DEPT. 17.

26-28 Vesey Street,

New York City.

in the mineral plant food, phosphoric acid and potash. All the potash, or nearly so, in the voidings of cattle is in the urine, and unless this is saved the potash is largely lost. We assume, however, that you are saving this by having it absorbed by the manure.—Ed.

GRAZING A HAY MEADOW.

Will you please tell me if stock will injure hay land by grazing on it during the winter months, say, one head per acre, and taken off when the land is miry?

H. M. OZLIN.

Not at all, if kept off when the ground is wet.—Ed.

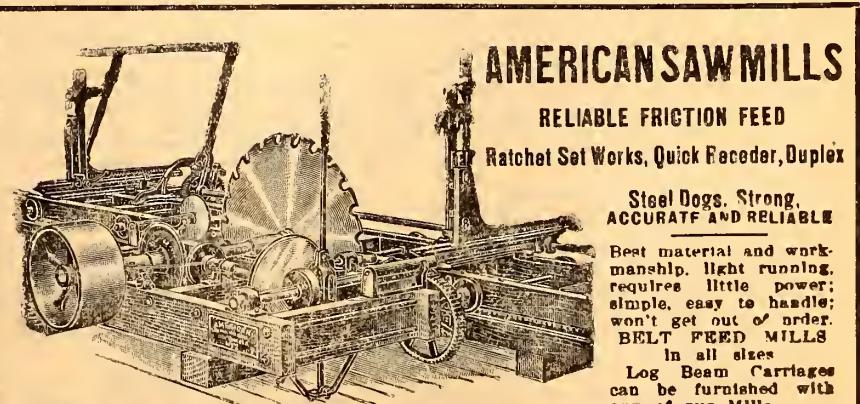
SORGHUM MOLASSES.

Can you or any of your readers inform me who has sorghum molasses for sale?

LOUIS E. URBINE.

Chesterfield Co., Va.

We do not know any one making sorghum molasses for sale in this State. There are factories making it in Georgia. Probably if you were to put a want advertisement in The Planter you would get it offered.—Ed.



No. 1. Warranted to cut 2,000 feet per day with 6 H. P. engine. Seven other sizes made. Also Edgers, Trimmers, Shingle Machines, Lath Mills, Rip and Cut Off Saws, Drag Saws, Cordwood Saws and Feed Mills Catalogue sent free.

"Rowe, Mass., October 24, 1906.—I have a No. 1 American Saw Mill and send you an order for another just like it. I run it with my 8 H. P. portable gasoline engine; have sawed 5,000 feet of lumber in ten hours with it without any trouble. I use a 48-inch saw.

Yours truly, BRADLEY C. NEWELL.

AMERICAN SAW MILL MACHINERY CO.,

OUR AGENTS.—Watt Plow Company, Richmond, Va.; R. P. Johnson, Wytheville, Va.; Hyman Supply Company, New Bern and Wilmington, N. C.; Gibbs Machinery Company, Columbia, S. C.

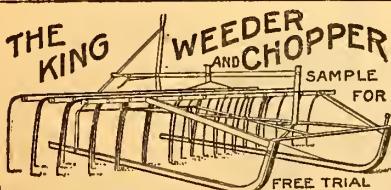
ENQUIRERS' COLUMN.

(Detailed Index.)

Lice on Horse.....	171
Celery Rotting.....	171
Mouldy Corn.....	172
Lice on Hogs—Grain Weevil—Lim- ing Land.....	172
Alfalfa—Tobacco Stems.....	173
Hog Pastures.....	174
Mercurial Ointment—Fertilizer for Corn—Lime.....	174
Bermuda Grass.....	174
Bad Milk.....	175
Fertilizer for Corn.....	176
Rotation of Crops—Hen House.....	176
Corn Fodder and Rutabagas.....	177
Crop to Follow Cabbage—Feeding Pigs.....	177
Hairy Vetch.....	179
Breaking Colt of Kicking—Corn Fertilizer.....	179
Tobacco Growing.....	180
Dehorning Pen—Grafting Apple Trees.....	181
Ice House.....	184
Curing Skins.....	184
Sawdust—Whitewash.....	184
Vetch Seeding—Corn Fertilizer.....	184
Corn to Plant.....	186
Wood Ashes—Tobacco Stalks.....	186
Enriching Manure.....	186
Grazing a Hay Meadow.....	187
Sorghum Molasses.....	187

FREE TO FARMERS.

By special arrangement with Ratekin's Seed House, of Shenandoah, Iowa, their big 1908 seed catalogue, with a sample of "Diamond Joe's Big White" seed corn, that made 146 bushels per acre, will be mailed free to every reader of this paper who are interested in the crops they grow. This big catalogue tells you how to make the farm and garden pay. It's worth dollars to all who plant or sow. Write for it to-day and mention this paper. The address is Ratekin's Seed House, Shenandoah, Iowa.



Patented 1906-1907.

We have "harnessed" the Weeder so that it is no longer a drag but a machine that is under the positive control of the driver. Will cut deep or shallow, give a light touch only, or put on weight, changing from one to the other in a second's time. A boy can easily control it. Runs smoothly over any form of soil preparation, in Cotton, Corn, Peanuts, Potatoes, etc. Write for descriptive booklet giving testimony from those who used it, the machine, the past season. Take AGENCY and get sample FREE. King Weeder Co., Richmond, Va.

OUR FERTILIZER MATERIAL FOR HOME MIXING.

Saves You \$6.00 to \$8.00 Per Ton.

Farmers, we sell you raw material for the home mixing of your fertilizer at a fair price which aggregates in the end the greatest economy you could practice.

Our materials contains the greatest amount of real plant food you could possibly buy at a given price. In buying them, you don't pay for "filler," as is the case of ready-made fertilizer. We give you the maximum amount of Ammonia, Potash and Phosphoric Acid, in minimum weight, saving you freight and handling. Confine yourself to our

NITRATE OF SODA, NITRATE OF POTASH,
MURIATE OF POTASH, KAINIT,
SULPHATE OF POTASH, THOMAS PHOSPHATE

SOLE IMPORTERS OF GENUINE PERUVIAN GUANO

the only complete natural manure, and the finest known base for use in home mixing. Write for 78-page book giving our prices, etc., and save your good money.

COE-MORTIMER COMPANY, Charleston, S. C.

Shipping Points, Wilmington, N. C. and Norfolk, Va.

FERTILIZERS

LEE'S PREPARED AGRICULTURAL LIME

Never fails to give good results when properly used. Wheat is now selling at a paying price, and from accounts of the present crop is likely to continue to maintain present prices.

The present troubles in Russia will, no doubt, reduce her exports, and the foreign demand will continue to be good. The use of \$3 to \$4 worth per acre will increase the yield 8 to 10 bushels per acre, thereby paying over 100 per cent. on the cost, besides improving the land and insuring a good stand and growth of CLOVER.

LEE'S SPECIAL WHEAT FERTILIZER.

Our sales for the season of 1906 were 62 per cent. larger than those of 1905. Those who have tried it bought more largely the next year, and say they have a better stand and growth of Clover and Grass than they have from any fertilizer they have ever used.

LEE'S HIGH-GRADE BONE & POTASH.

For Potatoes Cabbage and other Vegetables.

IMPORTED THOMAS BASIC SLAG.

Millions of tons are used in Europe. It is the best and most lasting Fertilizer for Wheat, Grass and other crops on the market, having 16 per cent. Phosphoric Acid and 40 to 50 per cent. of Free Lime. It is a complete FERTILIZER.

A. S. LEE & SONS CO., Inc
RICHMOND, VA.

DON'T BUY GASOLINE ENGINES

alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Costs Less to Buy—Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or traction engine. SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mfrs., Meagher and 15th Sts., Chicago.

UNTIL YOU INVESTIGATE
"THE MASTER WORKMAN,"
a two-cylinder gasoline, kerosene or

A WORD ABOUT SILOS.

In feeding ensilage it is of prime importance for the farmer to provide himself with a silo that is air-tight when built and will so remain for years. The Economy Silo not only keeps the ensilage in perfect condition, but, being made of strictly first-class materials, it lasts almost indefinitely.

The staves are either of carefully selected Canadian White Pine or Louisiana Tidewater Cypress, as the purchaser prefers.

The hoops of the Economy Silo form a permanent, safe, iron ladder, are made of refined iron and fitted with malleable iron draw lugs. They are well supported and of sufficient numbers for strength and convenience.

The doors placed between posts and continuous from top to bottom, are self-adjusting without complicated and clumsy fastenings, are easily opened—no wrench, hammer or heavy tool is necessary, and no raising of ensilage is required in removing it from the silo.

There are no bolt-heads or iron strips on the inside of the Economy Silo to rust and spoil the ensilage; neither are there hoops fastened on the inner side of the door posts to pull through or split.

The Economy Silo and Tank Co., Box 38G, Frederick, Md., has issued a complete illustrated catalogue containing many letters of commendation from users of its silo. This will gladly be sent free on request.

MAKING MONEY AT HOME.

Thousands of men and women are looking for some work that they can do at home and add to the family income. No work is more remunerative, when intelligently handled, than the raising of poultry. People will always need to eat. Eggs and chickens are relished by nearly everybody. The demand is constant. The market is seldom over-supplied. Prices are always remunerative and often very profitable.

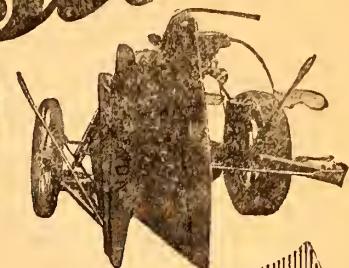
The capital required is small. One can start with one of the George Ertel Company's 100-Egg Hatching Wonder Incubators. This is a thoroughly practical, small machine. The price is only \$7.85 delivered at your railroad station, if east of the Rocky mountains. If the brooder is ordered with the incubator, the delivered price of both is only \$11.45.

If one has a little more capital it will mean larger profits to get a 200-egg machine or two. The Ertel catalogue, "Incubator Whys," will be found helpful in selecting an outfit. Its hints and helps will save the beginner money and trouble. A copy will be sent free to any readers of The Southern Planter on request to George Ertel Company, Quincy, Ill. This firm was established in 1867 and is reliable.

Johnston

FARM TOOLS

NOT
IN THE
TRUST



When you put your money into a **Johnston** farm implement you can rest assured you will get the very best value you ever obtained in farm machinery.

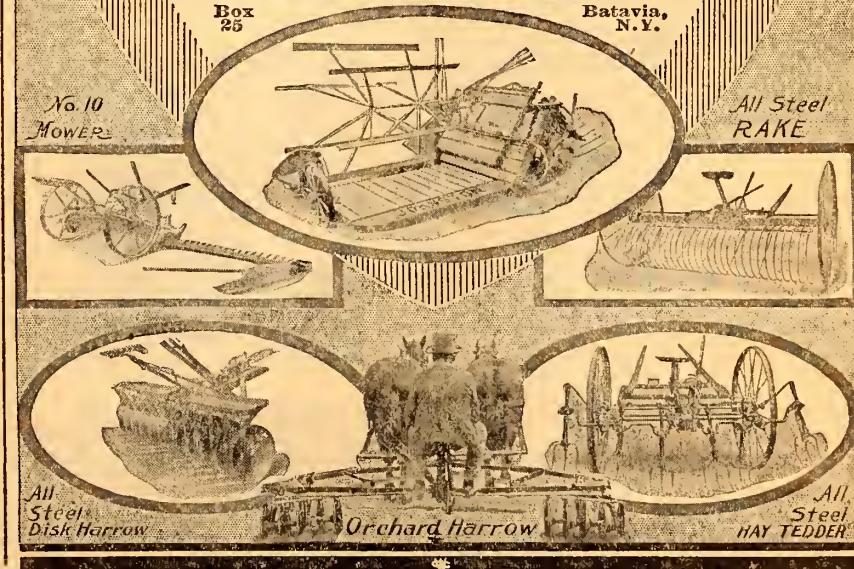
The reason why they stand so high with the thousands of farmers in this and foreign countries is because they give that **real, genuine satisfaction in the field** which every buyer of farm tools hopes to get. They fulfill the highest expectations; are so positively **dependable**, so thoroughly **practical** and do the work so much better, quicker and easier than when compared by **actual service** with others, their superiority is at once apparent.

Here we show some of them. We cannot tell you all their special strong features here; their exclusive advantages—the points that make them superior to others, or show you by illustrations just why they do their work better, quicker and easier, just why they last longer, why the breakage is so rare, why they are the cheapest; but our 1908 Catalog gives full description of our full line. You should not buy a single tool until you read it. It will help you to avoid making a mistake and post you on latest improvements. A postal brings it. Write today.

THE JOHNSTON HARVESTER CO.

Box
25

Batavia,
N. Y.



Augusta Co., Va., Dec. 30, 1907.

The Southern Planter is a welcome visitor at my home and I feel that I cannot do without its good advice.

SAMUEL FORRER.

Augusta Co., Va., Dec. 25, 1907.

The Southern Planter is full of valuable information for farmers, and I cannot afford to be without it.

R. F. LAREW.

There is so much humbug in the fence business to-day that farmers dread the buying of a new fence. Many fences rust badly in from six to twelve months. The old style process of galvanizing wire, used ten years ago, was slow, but it made good wire. The old process is not rapid enough for many wire makers to-day. They invented a new hurry-up process that makes twice as much wire in a day. Spelter is the material with which wire is galvanized, and there are many grades of it. The hurry-up process of galvanizing and a poor grade of spelter combined makes the rust-quick wire of to-day. Haven't you had about enough of the rust-quick kind of fence? We are of the opinion that there are just as good fences made to-day as ever before. We have in mind a company that has advertised with us for years. They claim to use the old process of galvanizing, the best grade of spelter and that their fence will last for years. Their claims are so broad we certainly would have heard from some of our subscribers if their fence was faulty in any way. Their catalogue is the largest of the kind published and is full of useful information. We request all needing fence to write for their free catalogue. Mention this paper and address Kitselman Bros., Muncie, Indiana. See their ad. elsewhere in this issue.

YOU, READER, FOR A POSTAL CAN GET ON
DEERE'S FREE LIST AND GET THREE
FREE BOOKLETS AT ONCE.

"Write a postal to Deere" is the new idea of one of the oldest and most reliable implement concerns in America to get in touch with Farmers and Planters everywhere so that when you once write to them they keep your name on their Free Mailing List and send you free books regularly so you can keep posted on all the latest improvements and values and be a judge of the best farm implements of all kinds.

Right now you can get free for a postal their new 1908 book on "Corn—More and Better" which contains all the latest results of scientific and practical corn raising, explained by high authorities. The cover shows picture of the ideal prize ear of corn reproduced in natural colors. This book is chock-full of valuable information from cover to cover. You'll also get a free Pocket Ledger and a free booklet about any of the famous Deere Farm Implements that you are interested in. It don't matter what kind of farm machinery you want to investigate you ought to be on Deere's Free Mailing List and read their books before you decide finally to pay out your money. Investigate this way their World famous "Model B Disc Harrow"—"No. 9 Corn Planter"—"New Deere Hay Loader"—"Stalk Cutter"—"Disc Cultivator"—"Disc Harrow"—"Corn and Cotton Planters"—and, in fact, a dozen or more newly improved implements for almost all kinds of farm work which are all built on the "Deere Durability" idea.

You know how famous the "Deere" name is, and we advise you, and every reader to "write a postal" to Deere & Mansur Company, Moline, Ill., with your name and address. Be sure to mention that you saw this offer in our paper and you'll get prompt returns. Ask about any implement you are most interested in. Write today.

Dinwiddie Co., Va., Dec. 25, 1907.

I do not know what I would do without The Southern Planter.

JOSEPH WOOD.

Farms in Northern Virginia

DAIRY, GRAIN, STOCK, POULTRY, FRUIT.

Near Washington and Baltimore and in easy reach of Philadelphia and New York.

Unlimited markets and unsurpassed shipping facilities.

Reasonable in price. Near good live towns, schools and churches. Write us.

STEPHENSON & RAINES, HERNDON, VA.

JOHN F. JERMAN,

Headquarters for Virginia Property, Fairfax Va.

Washington Office, No. 1228 H Street, N. W., and Vienna, Va.

If you want to buy a grain, dairy, fruit, truck, poultry or bluegrass farm, city or village property, or any kind of business proposition, such as hotels, stores, livery stables, schools, or any kinds of shop, it will pay you to send for my 50-page catalogue. It is full of bargains near steam and electric railroad and near Washington, D. C., where we have the best of market. I am always ready to show property. I try to please.

MY MOTTO: "HONESTY AND FAIR DEALINGS."

VIRGINIA FARMS

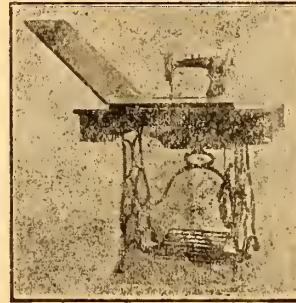
Healthy, productive and rapidly improving section; three hours ride to Washington; thirty minutes to Richmond. Good local markets. Electric and steam railroads. Fine poultry, stock, tobacco and general farming section.

Four Thousand Dollars will buy a most desirable farm, containing 140 acres, with necessary buildings and fences, large orchard, over 100 acres cleared and in good state of cultivation, convenient to Ashland. Many other attractions.

FRANK H. COX

Ashland, Hanover County, Virginia.

Price \$18.00—Worth \$30.00



We Prepay Freight Charges.

ball-bearing wheels, woodwork, good quality, finished in oak, curved front, quartered-oak, hand-finished cover, skeleton drawer cases, three drawers, the middle drawer of sliding pattern, lined with velvet to receive the following attachments, which we give free with machine: Ruffler, tucker, binder, braider, 4 hemmers, assorted widths, quilter, thread cutter, foot hemmer, and feller, all made of steel throughout, also dozen needles, six bobbins, filled oil can, large and small screw drivers, sewing guide, guide screw, illustrated instruction book, certificate of warranty for five years. Our machine forms double lock stitch, easy to operate, simple to thread. DO NOT HESITATE TO ORDER, as this is a perfect machine, and is fully guaranteed. MAIL us your order to-day with \$18. Address

R. A. MORRISSETTE MAIL ORDER HOUSE,
THE HOUSE THAT SAVES YOU MONEY,
BOX 240 S. 1st. RICHMOND, VA.

TELL THE ADVERTISER WHERE YOU SAW HIS ADVERTISEMENT.

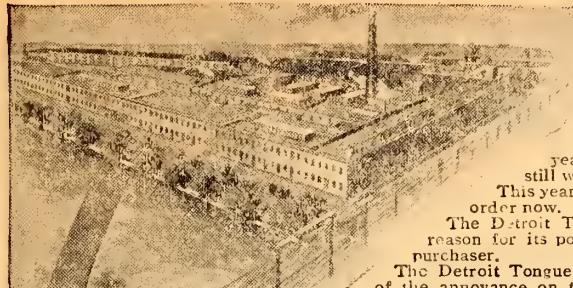
Ladies Don't Sew

On an Inferior Machine

YOU DON'T HAVE TO

For we will sell you a High-Grade Machine for only \$18 and we prepay the freight charges to your station. Our Defiance Machine is worth \$30 and must not be confounded with cheap, inferior machines. Our Machine is built to work well and wear well.

Description: Our Defiance has drop head with automatic belt replacer. The middle drawer of sliding pattern, lined with velvet to receive the following attachments, which we give free with machine: Ruffler, tucker, binder, braider, 4 hemmers, assorted widths, quilter, thread cutter, foot hemmer, and feller, all made of steel throughout, also dozen needles, six bobbins, filled oil can, large and small screw drivers, sewing guide, guide screw, illustrated instruction book, certificate of warranty for five years. Our machine forms double lock stitch, easy to operate, simple to thread. DO NOT HESITATE TO ORDER, as this is a perfect machine, and is fully guaranteed. MAIL us your order to-day with \$18. Address



**Sold from Our Factory to Your Farm
—Try It for a Month on Approval—
We Allow Freight and Sell for Cash**

or on Time Year before last we had over 1,600 orders for this Disc

that we couldn't fill—had to return the orders. Last

year we made twice as many Discs as the previous year—and

still we couldn't nearly fill all our orders.

This year we have increased our factory facilities, but we advise you to

order now.

The Detroit Tongueless Disc Harrow has had a wonderfully large sale. The reason for its popularity is the fact that it gives absolute satisfaction to every single purchaser.

The Detroit Tongueless Disc Harrow is right. The Forward Truck does away with all of the annoyance on the team of the old "tongue." It does away with all jamming—end thrust and whipping of the horses, that frets them and puts them out of commission just at the time you need them most.

Detroit Tongueless Disc Harrow

See the two wheels back of the Disc Blades in the picture below? These wheels are a part of the Detroit Tongueless TRANSPORT TRUCK (an important, exclusive feature, made by us only, sold with our Detroit Disc if desired). Upon this truck you can raise the Disc Blades off the ground, making them rest on the front and back Trucks—so that you can drive the Harrow over stony ground, rough and sandy roads, bridges, etc., without dulling the blades or cutting up the surface.

A good invention—that Transport—the way it saves Disc Blades that have to be transported from one field to another or from house to field. We allow a full month's approval test on each Detroit Disc. At the end of that time—if you don't want it—return it to us. We'll allow the freight—thus the test won't cost you one penny.

We're anxious to send a Detroit Tongueless Disc Harrow to any responsible farmer—without deposit—and without advance payment—to make the test. You can buy the genuine Detroit Tongueless Disc only from us direct. We advise you of this because we sell only from factory to you—and you can buy a Detroit Disc from us only—because we do not sell dealers.

Drop us a postal card, giving your name and address, and let us send you our new, 1907-08 Disc Catalogue.

NOTE:—Full line of Detroit Tongueless Discs are carried at our branch houses in all leading trade centers, enabling us to make prompt shipment to all points.

Send For Free, Sold on 30 Days Book Today

Approval Test

Cash or Time



See Team Making Turn—Both Horses Pulling Equally—No Tongue to Bother Them

American Harrow Co., 601 Hastings Street Detroit, Michigan

HORSE FAKIRS.

Editor Southern Planter:

Having received numerous letters from Virginia, Maryland and Pennsylvania, all mentioning the slick-tongued salesman and his methods, and several asking why I do not expose them, and others asking when such fakirs will be put out of business, etc., I will answer these inquiries through your Journal and others.

As long as an importer can sell a stallion that would be well sold at his barn at from \$1,000 to \$1,500, through the medium of a smooth, sharp salesman with the bought help of a popular horseman, or farmer who takes advantage of his confiding neighbors, to help form a company, at from \$2,000 to \$3,000, just so long will such conditions exist. "Expose them?" Why, what's the use? "Three card monte," the "shell game," and the "green goods" people have been talked about and written about and exposed in almost every conceivable manner, but have they ceased to exist? No! they work in certain obscure districts, and always will where fools are plentiful. What does a sensible, reasoning man think when he

Merchants National Bank,

RICHMOND, VIRGINIA.

Virginia's STRONGEST National Bank.

**THE BEST BANK FOR FARMERS
& & and Country Merchants. & &**

JOHN P. BRANCH, President.

THOS. B. MCADAMS, Cashier.

3% SAVINGS DEPARTMENT 3%
INTEREST

Pulls Stumps or Standing Trees.

Clears a two acre circle with one sitting—pulls anything the wire rope will reach; stumps, trees, grubs, rocks, hedges, etc. A man and a boy with one or two horses can run the

COMBINATION STUMP PULLER,

Stump Anchored or Self Anchoring.

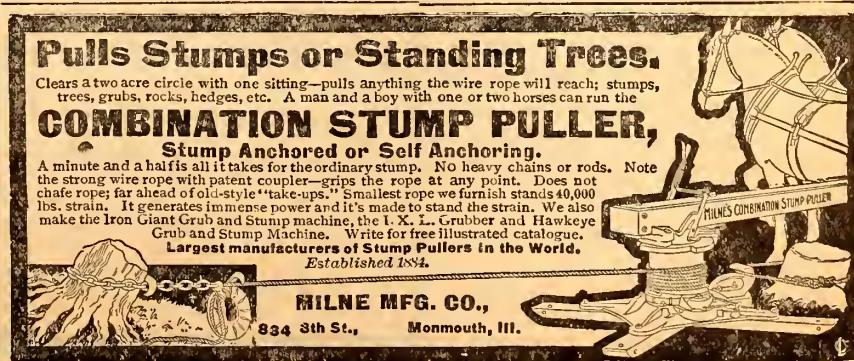
A minute and a half is all it takes for the ordinary stump. No heavy chains or rods. Note the strong wire rope with patent coupler—grips the rope at any point. Does not chafe rope; far ahead of old-style "take-ups." Smallest rope we furnish stands 40,000 lbs. strain. It generates immense power and it's made to stand the strain. We also make the Iron Giant Grub and Stump machine, the L. X. L. Grubber and Hawkeye Grub and Stump Machine. Write for free illustrated catalogue.

Largest manufacturers of Stump Pullers in the World.

Established 1882.

MILNE MFG. CO.,

834 8th St., Monmouth, Ill.



reads an advertisement like this: "With every stallion I sell I give away an imported mare, etc., etc." Now, if the stallion is worth anything like the price asked for him, how can this firm move their horses from State to State and pay transportation charges, excessive feed bills, hotel bills, bar bills and other bills too numerous to mention, and compete with a breeder or importer who pays none of these bills and sells only at his barns, and does not "throw in" an imported mare with each stallion sold?

They cannot do so and give value for the money. This kind of talk and style of doing business doesn't emanate from respectable men, nor does it belong to any respectable business.

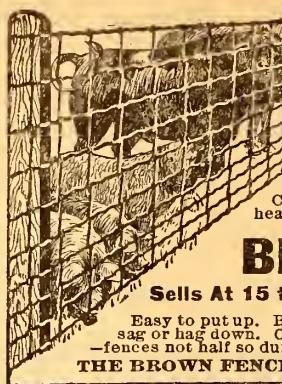
I heard last month in Maryland a number of gentlemen, a few of whom were farmers, discussing an import whom they said stated that he was importing and selling horses at no profit, but as he had money enough, he only imported and sold them to help his countrymen. Now, this party is indeed a philanthropist—most men could find a better and more direct mode of helping his countrymen. I think if all of his importations were like what I have seen, he has not helped, but hindered, his countrymen by placing such animals in their neighborhood, at whatever the cost. A man or a company who is not a judge of horses is often "duped" by persons who know, but, for a sum, "stand in" with the seller. The buyer should get a good judge and a reliable man to go to the barns and select a horse, and pay cash for him. The paper these "fakirs" demand is good at any bank for cash by putting up the security as collateral.

JOHN F. LEWIS.

BUYING DIRECT FROM MANUFACTURER.

At Cleveland, Ohio, eleven big factories in order to ship their goods on a "bee line" to the consumer, have for selling purposes combined under the name "The United Factories Company." They embrace the following lines of manufactured goods, Paint, Stoves, Roofing, Vehicles, Steel Wheels, Incubators, Sewing Machines, Buggy Tops and Trimmings, Fencing and Agricultural Implements.

The United Factories' catalogue is in reality eleven interesting books combined in one, covering the eleven lines of goods mentioned above. But the selling plan is the same. No matter which kinds of goods a man wants, he simply writes have them shipped to him on approval. A person isn't even required to send any money with the letter unless he wants to. This generous and unusual Selling Plan not only means an actual saving of about one-third on every purchase, but it means that a man doesn't need to pay for his goods until he has seen



EXTRA LARGE STRONG

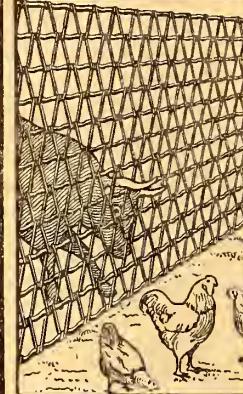
Get Our Free Sample which we send for inspection. Test it for strength, stiffness and rigidity, then look to the Galvanizing. File it and see how thick that is. We want you to satisfy yourself that for you, Brown Fence is the best fence to buy for Horses, Cattle, Sheep, Pigs, Chickens, etc. Our fences are made of extra heavy Steel Wire,—both strand and stay wires No. 9 gauge.

BROWN WIRE FENCE

Sells At 15 to 35 Cents Per Rod Delivered—WE PAY FREIGHT

Easy to put up. Bull-proof and Pig-tight. Stands stanch, solid and rigid. Won't sag or sag down. Our prices are less than you would pay for much lighter fences. —fences not half so durable. Write today for sample and catalog showing 133 styles.

THE BROWN FENCE & WIRE CO., CLEVELAND, OHIO.



STRONGEST FENCE MADE

When you buy our High Carbon Coiled Spring Fence you buy strength, service and durability combined. Twenty years of experience—hard knocks, has taught us that the best fence is made from heavily galvanized Coiled Spring Steel Wire

CLOSELY WOVEN FROM TOP TO BOTTOM

Our Fence is so closely woven that small pigs cannot "wiggle" through it. So strong the vicious bull cannot "faze" it. We have no agents. We do not sell to dealers but sell direct to the user

AT WHOLESALE PRICES

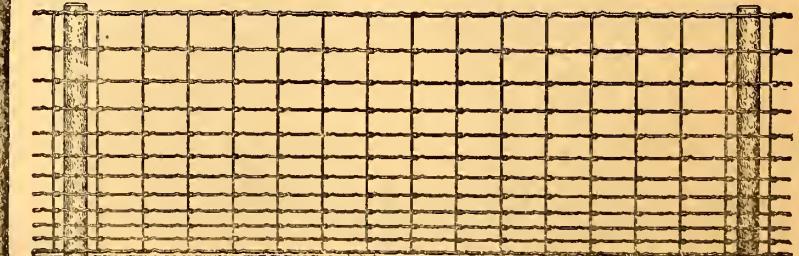
FREIGHT PREPAID

Coiled Wire provides for contraction and expansion and prevents sagging between posts. Every pound of wire in our fence is made in our own wire mill from the best high carbon steel. We give

30 DAYS FREE TRIAL

That our customers may be sure they are satisfied. We make a full line of FARM AND POULTRY FENCE. Our Wholesale Prices will save you money. Write today for our 40 page free Catalog.

COILED SPRING FENCE COMPANY, Box 52 Winchester, Indiana.



Stands Like a Stone Wall

Turns Cattle, Horses, Hogs—Is Practically Indestructible

AMERICAN FENCE

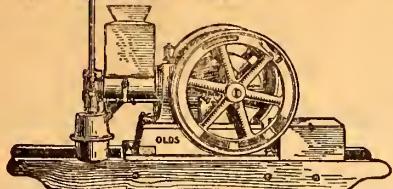
Buy your new fence for years to come. Get the big, heavy wires, the hinge joint, the good galvanizing, the exactly proportioned quality of steel that is not too hard nor too soft.

We can show you this fence in our stock and explain its merits and superiority, not only in the roll but in the field. Come and see us and get our prices.

Our Complete Catalogue of Improved Farm Machinery sent to any address free.

THE IMPLEMENT COMPANY.
1302 E. MAIN ST. - - - RICHMOND, VA.

OLDS ENGINES



Our New Hopper Jacket Engine on Skids.

This company has been making engines—and nothing else—for thirty years. We are engine specialists.

It stands to reason that a big, successful concern like this, that makes one thing, must make that one thing well.

Our new factory is the most complete and up-to-date engine factory in the United States. Because of its complete equipment we can build engines of the highest efficiency at the very lowest cost.

That is why we can give you a durable, simple, strong, highest-grade, perfect-working, long-lived engine at a low price.

This liberal proposition is the crowning reason, on top of a lot of good common sense ones, why you should buy an Olds Engine and none other.

We Have Any Kind of an Engine You Want

Our new catalogue tells about them in detail. I especially want to call your attention to our Hopper Jacket Engine on skids or wheels, 3 to 12 H. P., which is ready to run when you get it. Fill it with gasoline, throw on the switch, turn the wheel—that's all. No piping to connect, nothing to set up, always ready, can be moved anywhere.

I want you to get the most liberal proposition ever made on a Gasoline Engine. It will save you money. When a company like this, the oldest and biggest exclusive gasoline engine manufacturers in the country, make such a proposition, it means something. I have placed my proposition in the hands of our representatives. Write to them or to me, and you will receive it by return mail.

JAS. B. SEAGER,

Gen. Mgr. Olds Gas Power Co.

The Olds Engine is the best and cheapest Engine you can buy. It is the simplest in construction, most economical to run, will do your work at the smallest expense, and does not get out of order.

All Olds Engines run properly, are easy to start, winter and summer. The U. S. Government uses them.

Don't fail to write for our new catalogue and the liberal propositions at once. Address the home office or any representative.

Do not buy any other engine until you have got my liberal proposition. It is something unusual. You certainly want to know about it.

OLDS GAS POWER CO.

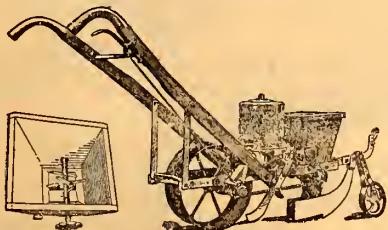
Home Office, 949 Seager St., Lansing, Mich.
Boston, 69-75 Washington St., N.
San Francisco, Cor. Jessie and Ecker Sts.
Kansas City, 1226 W. Eleventh St.
Omaha, 1018 Farnum St.
Binghamton, N. Y., 23 Washington St.
Minneapolis, 313 S. Third St.
Philadelphia, 1816 Market St.
Portland, Oregon.
Elgin, Ill.
Kempton, Pa.
Houston, Texas.
Norfolk, Va.
Miami, Fla.

NEW THINGS!

THE IMPROVED "STAR"

CORN PLANTER with Fertilizer and Cotton Seed attachments.

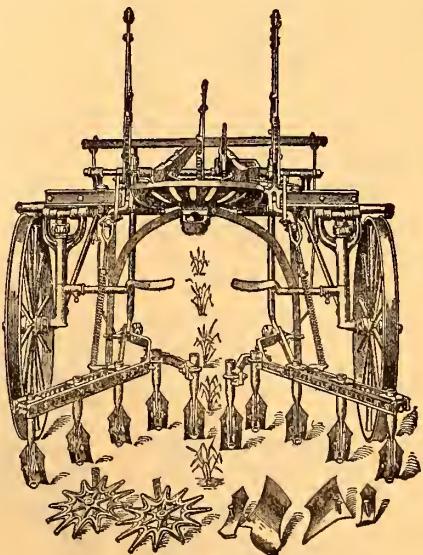
Drops any number of grains any distances and drills Peas, Beans, etc. etc.



THE MOST POPULAR PLANTER MADE.

The pivot wheel feature on this cultivator and on our disc cultivator are the great items; you steer them as you would a boat, and so perfectly easy. Don't confound these tools with those that try to move the tongue about. You will never buy any other if you see these.

See our advertisements of Double Acting Harrows and Mowing and Reaping machines.



PIVOT WHEEL! DON'T FORGET THAT.

That makes the difference: closes in to 38 inches between wheels adapting it to Peanuts and Vegetables.

them and knows he has just what he wants.

The United Factories Co.'s Catalogue is so radically different from ordinary mail-order catalogues and their Selling Plan so much more liberal that it would pay anyone to get one—especially since this big, attractive book doesn't cost anything at all. The United Factories Co., Dept. X-6, Cleveland, will be glad to mail their 1908 catalogue free to anybody who mentions this paper.

MAGAZINES.

"It is, I think, one of the most astounding facts in the history of man," writes Robert Hichens, in the first of his papers, in the February Century, on the monuments of Egypt, "that man was able to contain within his mind, to conceive, the conception of the Sphinx."

Mr. Hichens and Jules Guerin went to Egypt specially to gather material for this series of articles for The Century, and the first chapters are saturated with "the spell of Egypt," the reader gaining, through the magic of writer's words and painter's colors, those impressions of witchery, of wonder, of awe, which come in the actual presence of Egypt and her monuments. The magazine reproduces in full color four of Mr. Guerin's paintings, and he has never done more notable work.

"Sometimes it seems as if the very substances of my flesh were so many eyes looking out at will upon a world new created every day," writes Helen Keller in the first of her articles entitled, "Sense and Sensibility," in the February Century. This paper through out is almost a hymn of rejoicing over the wealth of sensations which she has through the senses left her.

The timely article of the number is a discussion of "The Cycle of Prosperity," by Alexander D. Noyes, financial editor of the New York Evening Post, who declares that economic history proves that after each successive financial crisis American finance and industry have in due time risen to far greater heights of genuine power and prestige.

"The Reminiscences of Lady Randolph Churchill," in this number, deal engagingly with London political society and campaign experiences in the eighties; and Professor Lowell continues the demonstration of his theories of Mars with discussion of "The Evolution of Life."

The stories of this number range from humorous to tragic. And for a grim, creepy, short story, astonishingly novel in plot, read E. P. Campbell's "The Road to Those Below." Editorially, The Century follows up its advocacy of two popular causes, free art and forest conservation in the East—printing comments on the proposal of a Conference of Governors, from seventeen governors of the Appalachian and Coast States, every one of whom

From Our Factory to Your Farm—For a Full Month's Approval Test—Freight Allowed—Sold For Cash or on Time Payments

We will send you a genuine American Manure Spreader and allow you a full month's approval test. You can use it on your own farm for a full month. Then if it doesn't prove to be all we claim for it—just ship it right back to us—the test shan't cost you anything. You simply cannot afford to pass an opportunity of this kind—can you?

Be sure and get our proposition and our Big, Free Spreader Book before you buy from anyone. This book describes and illustrates our entire line of American Spreaders—9 styles, 5 sizes—and quotes factory prices to you direct. This Book is a valuable guide in buying a Spreader—full of information for the practical farmer.

American Manure Spreaders

A Manure Spreader is a machine that must first be constructed on right principles—and then built thoroughly right to stand severe strain and hard, long wear and usage. The cheaper constructed machines may look good enough and work well enough at first—but—will they stand up under the strain of use? Too great care cannot be taken in selecting a Spreader right in the first place. The test of time is the test that tells whether you have saved or lost money on the Spreader you buy. Your guarantee against disappointment and loss is the known responsibility—reliability—and strength of the factory behind the Spreader you buy. The AMERICAN SPREADER is backed by a company whose name alone has been a guarantee for high quality and honest dealings for over 25 years.

ASK THE MAN WHO OWNS AN AMERICAN

—as to its general quality—correct principle of construction—perfection of work. Ask him what it saves him in time—what it makes for him year after year. Ask the man who owns an American how he's been treated in his dealings direct from factory—in fact, ask the owner of an AMERICAN all about the American Spreader—and the factory that makes it—we'll stake our chances of selling you an American on his answer. If you do not know an owner of an American we'll gladly mail you a large list of purchasers to whom you may write. Will you let us send you our big Spreader book now! It's free—just send postal.

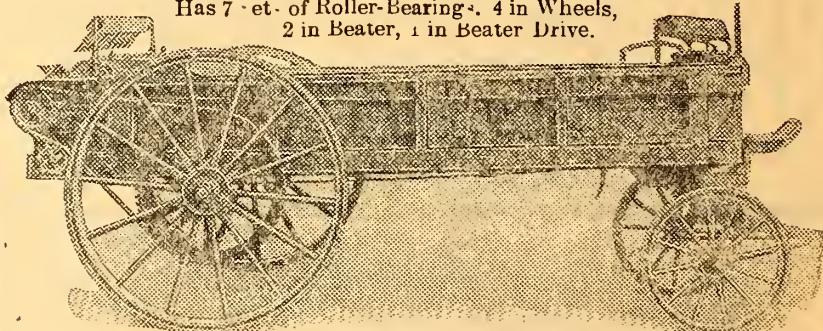
American Harrow Company

622 Hastings Street, Detroit, Michigan



THE SUCCESS SPREADER

Has 7 · et. of Roller-Bearing · 4 in Wheels,
2 in Beater, 1 in Beater Drive.



One Horse Lighter Draft Than Any Other Spreader

Extra strong steel pin chain, direct drive. We discarded gear drive on account of breakages. 2 1/4-inch cold rolled steel rear axle. Narrow front trucks to prevent tongue whipping horses and to make easy turning. Extra strong steel or wooden wheels. Staunchest frame on any spreader. Puts all operating strain on rear axle by steel bracing, none on frame. Apron locks to prevent "racing." Worm apron drive runs in oil. Perfect and easy control perfect work. It's the result of 29 years' spreader building. Catalogue free.

KEMP & BURPEE MANUFACTURING COMPANY, SYRACUSE, N. Y.

PROSPEROUS FARMERS BANK BY MAIL

THE CONNECTING U. S. MAIL

PLANTERS NATIONAL BANK

CAPITALS \$1,300,000

LINK

Mail Us Your Deposits

If you desire modern, progressive service, and at the same time absolute safety for your funds. This bank has the largest surplus and profits of any bank in Virginia, which demonstrates the conservative methods and liberal treatment to its patrons. One dollar starts an account.

Let us hear from you to-day. We pay 3 per cent. compound interest in our SAVINGS DEPARTMENT.

PLANTERS NATIONAL BANK, Richmond, Va.

G.W.E.

I am the
ACTUAL
MANU-
FAC-
TURER
of
Manure
Spreaders
—not a
Jobber, so
the Galloway
really
is sold from
factory to
farm.

Galloway
of Waterloo

I Give You a Real 30 Day Free Trial With the Money In Your Pocket

YOU don't have to pay me or any one else a single cent on the price of my spreader before you try it or after you try it, if it doesn't prove itself to be the **best** made. I am not beginning in the spreader business. I have built spreaders for years. So I know what beginners don't know. I know how to and do build the Galloway Spreader so it can't break and wear out where experimental spreaders are sure to break and wear out. I challenge any other manure spreader seller or manu-

facturer to put his spreader alongside of the Galloway in the hardest kind of a test. I don't care what other spreader you try—it won't cost you a cent to try the Galloway at the same time. So it's certainly to your advantage to try the Galloway at no cost to you even if you do put up your money to try any other spreader. If the Galloway doesn't beat any other that you try, all you have to do is return it at my expense and you're not out a penny and you haven't risked a penny.

Galloway Wagon Manure Spreader

My Price—the Lowest

Ever Made on a
High-Grade Spreader

I make the only
70. bu. spreader
with wagon run-
ning gear. Pat-
ented. Some-
thing new. Worth
\$15 more than any
other. Costs you \$20 less.

The
ONLY
Endless
Apron
Force
Feed
Spreader
in the world.

Patented—
Worth \$25 on any
Spreader. Costs
you nothing on
the Galloway.

The ONLY
Spreader with
MALLEABLE
and
STEEL
for ALL

Parts
that
break
and
wear
out in
other
spread-
ers.

Fits the
wagon
gears you
already
have.



THE Galloway has the best improvements—all patented so you can't get them on other spreaders. The Galloway is

Lightest Draft—Feeds as You Wish—and is the Only Spreader that Fits Quickly and Easily to the Different Widths of Wagon Gears.

Send me a postal and I will send you, absolutely free, my special proposition to you, and the **Best and Biggest Manure Spreader Book, Free.**

William Galloway 219 Jefferson St.

WATERLOO, Ia.
Prompt delivery to you from Waterloo Factory or transfer points at Kansas City; Minneapolis; Madison, Wisconsin, etc.

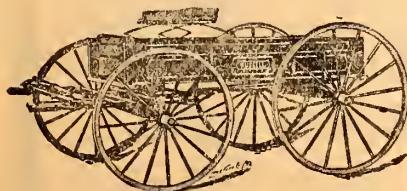
Established by
Geo. Watt, 1846.

MANFRED, CALL,
Manager.

THE CALL-WATT CO., 13 South 15th St., Richmond, Va.



COMBINED FEED MILL AND HORSE HOWER.



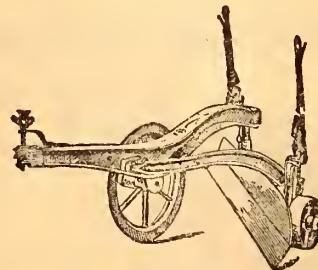
THE IMPERIAL WAGON.

BALING PRESSES FOR HAND, HORSE AND STEAM POWER.
FERTILIZER, LIME AND PLASTER SOWERS. EIGHT STYLES AND SIZES.
PEA HULLERS, GRINDING MILLS, HORSE POWERS, POLE AND WOOD SAWS.
ROAD ROLLERS, ROAD PLOWS, WHEEL AND DRAG SCRAPERS.
PLOWS AND PLOW CASTINGS IN GREAT VARIETY.

WE SOLICIT CORRESPONDENCE AND ARE PREPARED TO MAKE LOW PRICES.

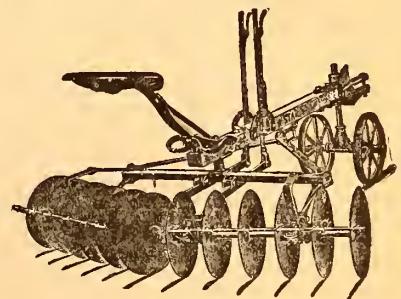
IMPLEMENT, MACHINERY,
WAGONS.

THE UNIT ROAD MACHINE



The Simplest, Easiest Managed and Least Expensive of Any.
Requires but one Man and one Team to Operate It.
Saves Labor Enough to pay for Itself in Two Days' Use.

The Price Brings it Within the Reach of All.



DISC HARROW WITH TRUCK



SOLID STEEL HEAD ROLLER.

expresses himself as strongly convinced of the importance of conservative action.

The novel feature of the February St. Nicholas is the first instalment of "The Story of the League," illustrated with reproductions of sixteen photographs of girls and boys who have been cash prize and gold badge winners in St. Nicholas League contests. This feature is to be continued, as it is the wish of the League editor to publish the portraits—and some of the work—of as many honor members of the League as may be possible—and an interesting and suggestive showing it makes.

All the boys will enjoy—why not the girls, too?—C. H. Claudy's story of "Ford's Trip in a Runaway Balloon," the tale of a plucky lad's unusual and risky experience. With the story go nineteen pictures, reproduction of photographs "taken on the spot," showing how a balloon is sent up.

The serials—"The Gentle Interference of Bab," "Harry's Island," "Three Years Behind the Guns," and "Famous Indian Chiefs"—are well under way, and there are short stories, rhymes and sketches in plenty. "Hints and Helps for 'Mother'" this month tells girls and boys how valentines may be made at home out of materials likely to be at hand—valentines dainty and funny. And the merry "For Very Little Folks Department" has several pages of jingles and pictures "All About Bobby Bear, Bubby Bear, and Baby Bear.

A Healthy Sign of the Times.
It is said that Lippincott's is one of in spite of "depression times." People seem to realize that such a bargain—twelve first-quality novels a year—is not a luxury, but a necessity. Hence they feel justified in holding on to this same investment with its big-paying dividends. Lippincott's is sometimes referred to as "a sure thing," and, in America, this expression covers a good deal—all of which must be highly gratifying to its publishers.

A glance at the February contents guarantees its popularity and explains its prosperity under these adverse conditions. "The Woman He Loved," Marie van Vorst's new novel, appears complete in that number. She requires no introduction to readers either in Europe or the United States, as her fame is international. "Jimmie Bulstrode" figures in this new story; he has made many friends in short stories which have appeared in Harper's and Scribner's, so that a new edition of this jolly bachelor bids fair to meet with an ovation from old and new acquaintances. The scenes of "The Woman He Loved" are laid about the estate of the Duke of Westboro, in England. The Duke is

RUBEROID

TRADE MARK REG. U. S. PAT. OFF.

ROOFING

THE STANDARD FOR
14 YEARS.

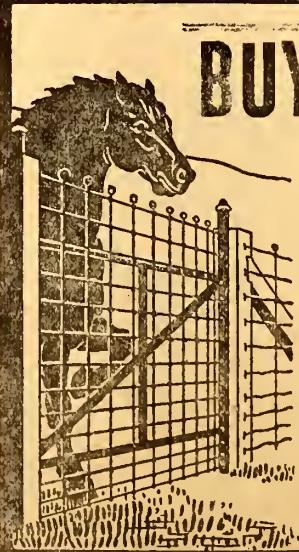
The oldest prepared roofing on the market, and the first Ruberoid Roofs, laid many years ago, are still giving satisfactory service under the severest climatic and atmospheric conditions.

Contains no tar or paper; will not melt or tear. Acid fumes will not injure it.

Outlasts metal or shingles. Any handy man can apply it.
There is only one Ruberoid Roofing, and we sell it. You can verify its genuineness by the name on the label and on the under side of every length of Ruberoid Roofing. Send for samples and booklet.

A large stock of Corrugated and V-Crimp Roofing always on hand.

Southern Railway Supply Company,
1323 East Main Street,
RICHMOND. Va.



BUY YOUR GATES

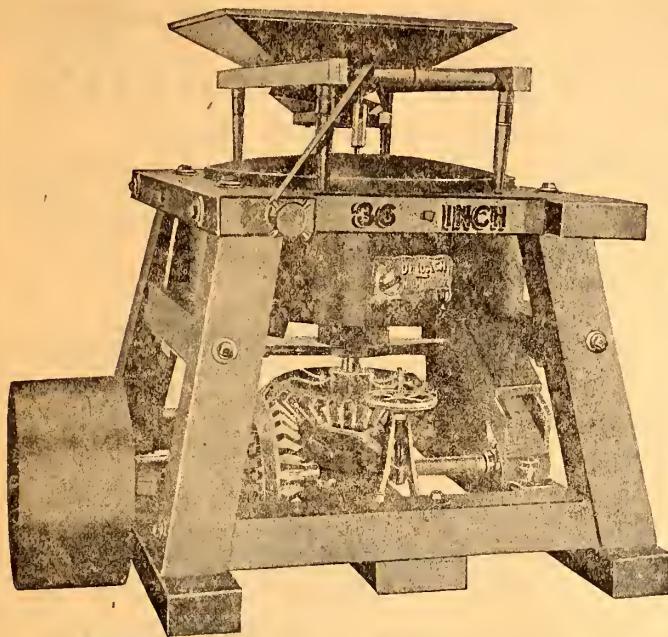
Direct from us and save the profit of the jobber, the dealer and the salesman. Our Gates are sold to you at wholesale, saving you 50 per cent. When buying from us you pay the actual cost of making, with only one manufacturer's profit added.

WE WANT AGENTS.

In every county in the State. One of our agents sold twenty-four Gates to one man. No trouble in selling them, as they are without question the best Iron Gate on the market for the money. Write for our catalogue and special proposition.

THE INTERNATIONAL FENCE CO.,
Box 698, Columbus, Ohio.

DeLOACH CORN MILLS



Produce more meal and better meal than any mills on the market.
Both Pulley and Geared Mills.
Under Runner Mills, 18 to 48 inches.
Top Runner Mills, 30 to 48 inches.
With the famous Virginia or Enopus Stones.
World beaters for making table meal.

Also French
Buhr Mills for all
Kinds of Grinding

Turbine and Over-Shot Water Wheels. The famous DE LOACH VARIABLE FRICTION FEED SAW MILLS, SHINGLE MILLS, PLANERS, GANG EDGERS, LATH MILLS AND WOODWORKING MACHINERY.

Engines, Boilers and Gasolene Engines
Send for Catalogue and tell us fully what you want.

DeLOACH Mill Mfg. Co. Box 265, Bridgeport, Ala.

W. K. BACHE.

S. S. MULFORD.

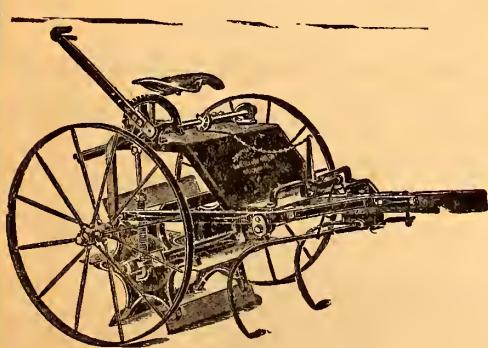
HARDIN K. BACHE.

CYRUS McC. BACHE.

W. K. BACHE, SONS & MULFORD.

1406 East Main Street, Richmond, Va.
"Everything used on the Farm."

Farming Machinery, Vehicles, Harness.



The "Bradley" 7 Blade. All Steel
Stalk Cutter, with Neck Yoke, Double-
bar, and Singletrees. The most per-
fect machine on the market for cut-
ting Cotton and Corn Stalks.

"Fairbanks-Morse" Gasoline Engines.
"New Holland" and "Peerless" Cob and Corn
Grinders.
"Challenge" Horse Powers and Grinders.
"Appleton" Common Sense Saw Frames Com-
bined Pole and Wood Saws.
"Tennessee" and "Thornhill" Farm Wagons.
"Anderson" and "Ames" Buggies Surreys, etc.
"Ontario" and "Pennsylvania" Grain Drills.
"Swiss" Hand and Power Feed Cutters.
Land Rollers, Baling Wire and Twine.

estranged from his American wife, and Bulstrode's tender heart—made tenderer, perhaps, by a seemingly hopeless love affair of his own—lets the troubles of his friends trouble him to the extent of evolving a plan to smooth out their differences. How kind fate helps along his scheme, incidentally rewarding the benefactor, notwithstanding interesting complications which threaten to wreck his craft, makes a deeply absorbing tale, while the vibrant, magnetic style of the author charms to the very verge of hypnotism.

PROGRAM FARMERS' SCHOOL OF INSTRUCTION.

Powhatan Courthouse, Virginia.

Tuesday, February 11, 1908.

Morning Session.

Called to order 10 A. M.
Grass Culture, Mr. T. O. Sandy, Burkeville, Va.
Corn Culture, Mr. S. F. Farrar, Jetersville, Va.

Afternoon Session.

Called to order 2 P. M.

Some Essential Points to be Observed by the Farmer in Breeding Horses, Dr. J. G. Ferneyhough, Burkeville, Va.
Farm Manures, Prof. D. N. Barrow, Washington, D. C.

Rustburg, Virginia.

Thursday, February 13, 1908.

Morning Session.

Called to order 10 A. M.
Corn and Grass Culture, Mr. T. O. Sandy, Burkeville, Va.
Seed Corn, Mr. R. W. Crouse, South Boston, Va.

Afternoon Session.

Called to Order 2 P. M.

Farm Manures Prof. D. N. Barrow, Washington, D. C.
Some Essential Points to be Observed by the Farmer in Breeding Horses, Dr. J. G. Ferneyhough, Burkeville, Va.

Appomattox, Va.

Saturday, February 15, 1908.

Morning Session.

Called to order 10 A. M.
Grass Culture, Mr. T. O. Sandy, Burkeville, Va.
Corn Culture, Mr. J. J. Gilliam, Farmville, Va.

Afternoon Session.

Called to order 2 P. M.

Some Essential Points to be Observed by the Farmer in Breeding Horses, Dr. J. G. Ferneyhough, Burkeville, Va.

Farm Manure, Prof. D. N. Barrow, Washington, D. C.

POINTER PUPS.

Mr. J. B. Waddill, Tate Spring, Tenn., is advertising some fine Pointer Pups this month. Look up his ad. and write him for pedigrees.

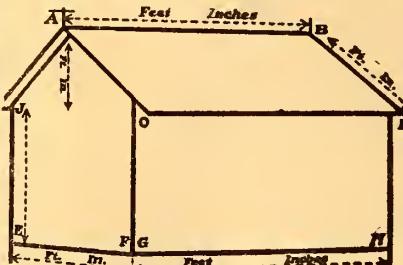
INDRUROID

RUBBER ROOFING

BEST BY TEST FOR THIRTY YEARS.

Most satisfactory and cheapest roofing made; absolutely waterproof; practically fireproof; climatic changes do not affect it; strong and tough; light in weight; needs no paint; easily applied; any workman can put it on.

Send for circular and prices.



Corrugated and V Crimp Roofing

Painted or Galvanized

(Measure roof as per diagram; give us measurement and we can tell just how much roofing will be required.)

TIN PLATE AND BAR IRON

Wholesale and retail, in quantities to suit purchaser. Prices and quality guaranteed. Write for circulars describing our goods.

**Bath Tubs, Lavatories, Sinks, Range
Boilers, Etc.**

McGRAW-YARBROUGH CO.

9-11 South Eighth Street, RICHMOND, VA.

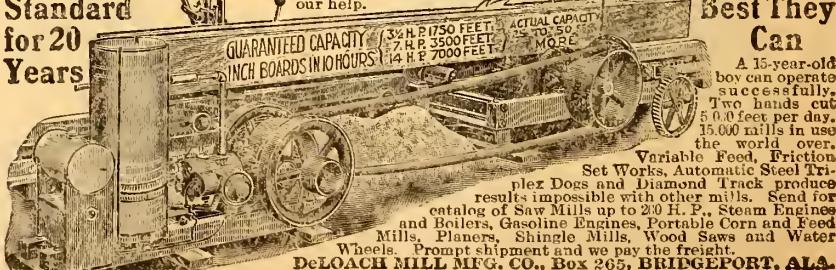
LOCAL AND LONG-DISTANCE PHONE 928.

The Celebrated DeLoach Mill

The
World's
Standard
for 20
Years

Saw Your Own Lumber
For lumber is lumber nowadays,
and you can do it better than
the other fellow, with
our help.

We Set the Pace
—Others do the
Best They
Can

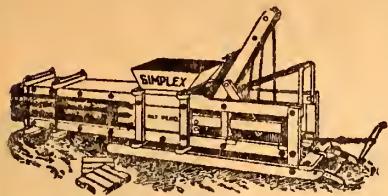


"IRON AGE" CATALOGUE.

The Bateman Mfg. Co., Grenloch, N. J., sends us its 1908 catalogue describing and illustrating its celebrated "Iron Age" farm and garden implements. Starting some seventy years ago, selling its product locally, this

Company now ships its machinery to every quarter of the globe where farming implements are used. Its advertisements are to be found in this issue. Look them up and send for the catalogue, which will speak better for itself than we can for it.

LEADING 1908 UP-TO-DATE LABOR SAVING 20TH CENTURY MACHINERY.



THE SIMPLEX PRESS.

Simplex Little Giant Baling Press for farmers' own use. Has large capacity. Write for circulars and prices.

19. S.B.



The "Genuine" Reed Spring Tooth Cultivator. Thousands used every year, giving perfect satisfaction. The Reed Spring Tooth Cultivator can be converted into a spring tooth harrow by buying the center gang at a small cost, making it a Spring Tooth Harrow on wheels. Write for the Reed Special Cultivator Circular and Catalogue.

BENTON DISC CULTIVATOR, WITH SIX OR EIGHT DISC AND SPRING TOOTH ATTACHMENT.

The "GENUINE" BROWN RIDING AND WALKING CULTIVATORS, furnished with BROWN 6 or 7 Knife Stalk Cutters. Write for special catalogue and prices.

BROWN Steel Lever Harrows, Wood Harrows, Case-Ring Bearing Disc Harrows, Spring Tooth Harrows. All sizes, plain or with levers. Acme Harrows of all styles kept in stock at lowest net prices.

Wood Saws for long or short wood. Write for 1908 catalogue and prices on Farm Machinery.

We carry in stock all sizes and styles of Scientific Mills.

THE NO. 20 POWER MILL.



This is the latest addition to the line of Scientific Feed Grinding Mills, and has been designed to meet the requirements of these having horse powers and small engines.

With a two-horse sweep power or with a two- or three-horse engine the mill will grind shelled corn, oats, rye, barley, wheat and all small grains at the rate of 10 to 20 bushels per hour; also grinds corn and cob.



Kemp's Twentieth Century Improved Manure Spreader. Made in three sizes. Write for prices and catalogue.

HENING & NUCKOLS,
1436-38 E. Main St. RICHMOND, VA



DON'T FORGET! All the merchants in town who claim to sell Oliver Chittell Plows and Repairs only sell the imitation, bogus, cheap goods. The only store in Richmond, Va., to buy Genuine Oliver Plows and Repairs is at

HENING & NUCKOLS.



YOU SAVE IT ALL
When you buy a corn crop for
the day feed or manure with
THE ROSS
Plowage Machinery.
Unequalled in material, construction
and cutting ability. Many
sizes. Elevates any distance, in
any direction at any angle. Don't
wait. Send for Illustrated Catalog.

RED DILLON. 38696.

Bay horse; foaled 1902; height 15.3 hands; weight, 1,200 pounds. Sired by Baron Dillon, 2:12; dam Zinda Lake by Red Lake, 2:15 1/2, sire of Lake Queen, 2:06 1/2, etc. Red Dillon is an inbred Wilkes, world's greatest race horse family. For terms and keep of mares Address JOHN B. VAUGHAN, Owner, Ashland, Va.

KOTOR, 36433.

(Trial, 2:28 1/4, Trotting).

Bay horse; foaled 1903; height, 15.3; weight, 1,100 pounds; by Kremiin, 2:07 1/2; dam, Aliene, dam of Metallic, 2:20, by Kentucky Prince, 2470.

Fee, \$25 the season, with return privilege. Write for tabulated pedigree. L. T. WHITAKER, M. D., Enfield, N. C.

PATRICK HENRY.

HACKNEY STALLION.

Chestnut horse by "Squire Rickel," son of the famous Cadet; dam, "Marjorie," a gold medal winner by "Roseberry."

For terms, address A. POLLARD & SONS, Dunraven Stock Farm, R. F. D. No. 5, Richmond, Va.

N. B.—Horses handled and conditioned; also hoarded and kept in any manner desired.

FRED HERR, 45239.

Bay horse; foaled 1902; height, 16 hands; weight, 1,100 pounds, by Charley Herr, 2:07; dam, Jessie P., dam of Annie Lee, 2:07 1/4; Jessie Herr, 2:18, etc., by Neapolitan, 9966.

Fee, \$10 season; \$15 insurance.

Address A. T. BROADDUS, R. F. D. No. 1, Highland Springs, Va.

Petaurist. 42431

Bay horse; foaled 1904; sired by Peter the Great, 2:07 1/4; dam Telka by Arion, 2:07 1/4, second dam La Joita, dam of Binjolla, 2:17 1/4, by Advertiser, 2:15 1/4, third dam Sally Benton, 2:17 1/4, dam of Serpot, 2:10, etc., by General Benten.

Note.—Petaurist is not only a trotter of fine form, exquisite quality and finish, but it is doubtful if any stallion so richly bred has been offered for public service in Virginia. He carries the blood of champions in each remove for generations back, and was awarded the blue ribbon in his class at the Virginia State Fair in 1907.

Fee—\$25 the season, with usual return privilege.

JOSEPH LASSITER, Nineteenth and Franklin Streets, Richmond, Va.

Red Guy, 21052

TROTTING STALLION.

Red Guy is a handsome Bay Horse, 16 hands high, weight, 1,000 pounds. Sired by Geymoor, 14885, son of Guy Wilkes, 2:15 1/4; dam Edna Wilkes, 2:23, by Red Wilkes, 1749; second dam the great brood mare, Moillie, dam of Edna Wilkes, 2:23, and McDowell, 2:26, by St. Elmo, 275.

Note.—Red Guy is from the family that produced Sonoma Girl, race record 2:05 1/4 this season, and sold for \$30,000.

For terms address AUGUST H. KLOCKE, Owner, Woodville Plantation, Crewe, Va.

R. H. RICHARDSON,

—Manufacturer of—
SADDLES, HARNESS, COLLARS.

—Dealer in—

Hardware, Paints, Oils, Glass, Farm Wagons, Buggies, etc.

1810 Hull Street, MANCHESTER, VA.

1908 IN THE STUD.

1908

GRANDEE.

The registered French Coach Stallion, GRANDEE, chestnut horse, 5, 16.1 hands, weight 1,300 pounds, Blue FEE—\$12 INSURANCE.

Address CARL H. NOLTING, Trevillian, Louisa County, Va.

N. B.—Rich bluegrass pasturage for visiting mares.
ribbon winner Virginia State Fair at Richmond 1906 and 1907.

Red Starshine, 31408.

TRIAL, 2:24 1/4, TROTTING.

Bay horse, 15.3 hands high; weight, 1,100 pounds. Sired by Acolyte, record 2:21, son of the renowned Onward 2:25 1/4; dam Kansas, dam of Bohemian 2:22 1/4, by William Rysdyk, 527.

Fee, \$15 the season; \$25 insurance.

G. A. FITTZ,
18 Bank Street, Petersburg, Va.

Stallion cards, folders and catalogues compiled; pedigrees of trotters, pacers and thoroughbreds traced, horses registered and race summaries supplied. I make a specialty of such matters, as my library includes all the Year Books, Trotting Registers, Stud Books, files of turf journals and other references. Inquiries promptly answered.

Address W. J. CARTER, 1102 Hull Street, Manchester, Va., or P. O. Box 929, Richmond, Va.

Representing The Times-Dispatch and Southern Planter, Richmond, Va.; Kentucky Stock Farm and The Thoroughbred Record, Lexington, Ky.; The Trotter and Pacer, New York; The Horseman, Chicago; The American Horse Breeder, Boston, and The Breeder and Sportsman, San Francisco.

With the new year, Deere & Co., the great plow manufacturers of Moline, Ill., put in force a pension system by which every employee who has been with them twenty years can retire on a life pension at 65 years of age, drawing monthly a certain per cent. of the total wage paid him during the entire length of his service.

This pension system is entirely a donation on the part of Deere & Co., as the employees contribute nothing to its support, but do have a voice in its management.

FOUTZ HORSE AND CATTLE POWDERS.

In another column will be found the advertisement of the D. E. Foutz Co., Baltimore, Md., makers of the well known Horse and Cattle Powders and other Veterinary Remedies, bearing their name. This Company's preparations have always been regarded as standard. For more than a generation, the farmers of the South have used them with success and satisfaction. When the Pure Food and Drug Law went into effect, this Company promptly registered its preparations and this, too, without having to change a single formula. Look up the ad. and send for some descriptive literature.

STEAM POWERS

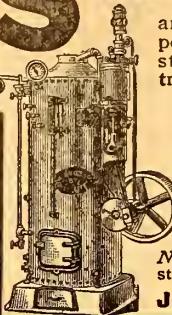
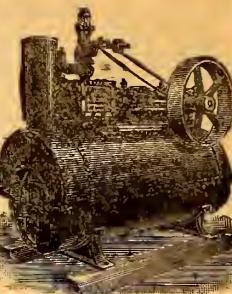
are as serviceable as any other style of power in every way, better than any other style in many ways. This is particularly true when applied to planters' uses.

LEFFEL

engines supply steam as well as power. Many the time you have use for steam. Leffel engines give you something you can depend on—for power and steam.

No trouble about making them work. Sizes and styles for all requirements. Write for Book.

James Leffel & Co., Box 202, Springfield, Ohio



Don't buy a Fence

until you have investigated the merits of
SUPERIOR FENCES. Made of 8, 9 and 10
HIGH CARBON COILED SPRING STEEL WIRE &
 locked with **SUPERIOR HEAVY WEIGHT LOCK**—
 All styles, heights and spacings—unquestionably
 the **BEST FENCE** made for all purposes. Also a very
 swell line of **STEEL GATES** both plain and ornamental. Cheaper than wood. **PRICES LOW—EASY TERMS**

Write for illustrated Catalog.
 THE SUPERIOR FENCE CO., Dept. J., Cleveland, Ohio.



WILL THE FARMERS HEED?

Who drove the farmers of Kentucky and Tennessee to burning warehouses and destroying tobacco plant beds?—The Trust. Who is responsible for the conditions among the cotton planters to-day?

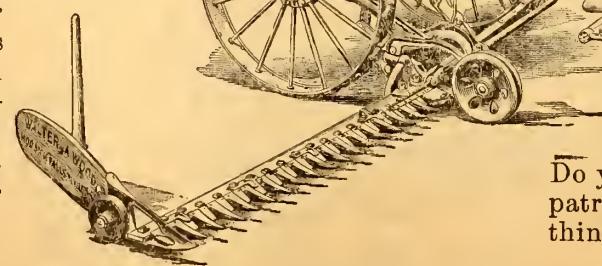
—The Trust. Who locked up all of the money in the country a few weeks ago?

—The Trusts. Who is responsible for the decline in the value of securities to-day?

—The Trusts.

Did we ever know such things before we had the Trusts?—No.

IT IS UP TO THE FARMER TO CHOOSE



Gloriously Independent.
 Marvelously strong.
 Wonderfully easy to handle.
 Astonishingly cheap in repairs.

The great competitor of the Trusts in machines. As independent as a wood sawyer & as strong as a giant

Do your duty as you see it; patronize that which you think is worth the most to you

ASHTON STARKE, SOUTHERN OFFICE; WALTER A. WOOD, MOWING AND REAPING MACHINE CO., RICHMOND, VA.

CLUBBING LIST

In this list will be found prices on papers, magazines and periodicals which are most called for by our readers. We have club rates with nearly all reputable publications, and will quote them on request.

DAILIES.

WITH
ALONE S. P.

Times-Dispatch, Richmond, Va. \$6 00 \$6 00

Times-Dispatch (without Sunday) 4 00 4 00

News-Leader, Richmond, Va. 3 00 3 00

The Post, Washington D. C. 6 00 6 00

The Sun, Baltimore, Md. 3 00 3 40

THRICE A WEEK.

The World, New York.... 1 00 1 25

WEEKLIES.

Times-Dispatch, Richmond, Va. 1 00 1 25

Southern Churchman, Richmond, Va. 2 00 2 25

Central Presbyterian, Richmond, Va. 2 00 2 25

Harper's Weekly.... 4 00 4 00

Breeders' Gazette.... 2 00 1 50

Country Gentleman.... 1 50 1 75

National Stockman and Farmer 1 00 1 00

Hoard's Dairyman.... 1 00 1 30

Memphis News-Scimitar.... 50 50

SEMI-MONTHLY.

Kimball's Dairy Farmer.... 1 00. 75

MONTHLIES.

The Century.... 4 00 4 25

St. Nicholas.... 3 00 3 25

Lippincott's.... 2 50 2 50

Harper's Magazine.... 4 00 4 00

Delineator.... 1 00 1 40

Harper's Bazaar.... 1 00 1 40

Scribner's.... 3 00 3 25

American.... 1 00 1 35

Cosmopolitan.... 1 00 1 35

Everybody's.... 1 50 1 75

Munsey.... 1 00 1 35

The Strand.... 1 20 1 50

Madame.... 1 00 1 00

Argosy.... 1 00 1 35

Review of Reviews.... 3 00 3 00

Field and Stream.... 1 50 1 50

Woman's Home Companion.... 1 00 1 25

Reliable Poultry Journal.... 50 75

Industrious Hen.... 50 75

Poultry Success.... 50 75

Blood Stock.... 50 65

Successful Farming.... 50 60

Amer. Fruit and Nut Jour. 50 75

Southern Fruit Grower.... 50 85

Shepherd's Criterion.... 50 75

Commercial Poultry.... 50 75

When two or more publications are wanted, the price for them can be found by deducting 50 cents from "price with SOUTHERN PLANTER."

We cannot, under any circumstances, furnish sample copies of other publications.

We will cheerfully quote our best price on any line of publications submitted to us.

Subscription Bargains

Farm and Fireside

Absolutely Free!

We have made arrangements with this well known publication by which every farmer in the South may have it absolutely free of cost. All you have to do is to subscribe to the

Southern Planter

At 50 cents a year and say in your order "send the Farm and Fireside also." This offer applies to all subscribers, new and old.

Farm and Fireside is one of the "old reliable" farm papers.

For thirty years it has been working for the best interests of American farmers.

It is clean, helpful and progressive.

Farm and Fireside is a paper for farmers in every section of the country.

It is as careful of its advertisements as of its reading matter, and guarantees the honesty and reliability of every advertiser.

Remember you get thirty-six helpful farm papers during the year for only 50 cents.

Send your order direct to us.

The Southern Planter,

RICHMOND, VA.

A. D. Shotwell, Pres. R. A. Bowen, Vice-Pres. Clarence Vaden, Cashier.

Bank of Manchester,

Manchester, Va.

CAPITAL, \$50,000.00.

Extends All Courtesies of Prudent Banking.

THE BANK FOR MERCHANTS, MECHANICS AND FARMERS.

3 Per Cent. Interest Allowed on Deposits.

TWO BIG BANKRUPT STOCKS.

A big opportunity to buy VEHICLES, FARM WAGONS, HARNESS, PLOWS, AGRICULTURAL IMPLEMENTS, FARM FENCING, AIR-TIGHT HEATERS, SEWING MACHINES, BABY CARRIAGES, Etc. Partial Price-List Below.

To add to our list of customers, we have purchased and now offer for sale two especially large bankrupt stocks which were bought by us at forced sales. Every article is absolutely new and all are of high-grade goods. Every purchaser has the right to return any goods not satisfactory, and we bind ourselves to return his money and pay freight charges both ways. Orders should be made from this advertisement, and we can furnish illustrations of most of the articles listed, and will gladly give any additional information desired. As a reference we refer you to the Bank of Richmond, Richmond, Va., or to the editor of this paper.

KEYSTONE FARM FENCING.

ILLUSTRATIONS FURNISHED ON REQUEST.

No. of Bars.	Height.	Distance Between Stays.	Mesh.	Price Per Rod.
11	56 inches	6 inches	12 inches	33 cents
10	47 inches	6 inches	12 inches	31 cents
9	39 inches	6 inches	12 inches	29 cents
7	26 inches	6 inches	12 inches	24 cents
7	26 inches	4 inches	8 inches	26 cents

BUGGIES AND CARRIAGES.

Open Runabouts.

Seven Road Wagons; body 24 inches wide; 15-16-inch long distance arch axles; 3 plate elliptic spring; wheels $\frac{3}{4}$ -inch tread, 38-42 inches in diameter; body painted black and gear Brewster green. Regular price, \$45. Our price.....\$33.40

Six Concord Road Wagons, without top; body 29 inches wide; seat measures 34 inches across top of cushion; ample room behind seat; 11-16-inch long distance axles; 5 plate springs; body black; gear yellow; genuine leather trimmings. A very substantial business man's rig. Regular price, \$75. Our price.....\$52.00

TOP BUGGIES.

Fifteen Top Buggies; body 20 inches wide; either 3 or 4 bow tops, as desired; 15-16 steel axle; wheels $\frac{3}{4}$ -inch tread, 40 and 44 inches in diameter; all bodies black, but either Brewster green or red running gear, as may be desired. Our price only.....\$42.00

Nine Top Buggies; 24-inch bodies; 15-16 long distance axles; $\frac{3}{4}$ -inch tread, either 2 $\frac{1}{2}$ or 3 inch bow tops; genuine leather trimming throughout; Brewster green gear and black body. Regular \$70 grade. Our price.....\$48.50

Seven Side-Spring Top Buggies; body 24 inches wide, 15-16 inches long distance steel axles; the celebrated Victor 4-plate side spring; body black and gear Brewster green; genuine leather trimmings. Selling price, \$75.00. Our price.....\$53.00

Phaetons, seat 31 inches across top of cushion; axles as above; $\frac{3}{4}$ -inch tread; wheels 36-44 inches in diameter; genuine leather trimmings throughout; body black and gear Brewster green. Regular price \$85.00. Our price.....\$68.00

FARM WAGONS.

One-Horse Farm Wagons.

Fourteen Russell One-Horse 2 $\frac{3}{4}$ -inch Thimble-Skein Wagons; tire 1 $\frac{1}{4}$ x 5-16; front wheels 3 feet 2 inches; rear wheels 3 $\frac{1}{4}$ x 8 inches. Capacity 2,000 pounds. Regular price \$32. Our price, complete with body and spring seat.....\$27.00 Gear only, our price.....\$23.50

The above wagons were made by Charles H. Russell & Son, Clarksville, Va., and are absolutely standard.

TWO-HORSE FARM WAGONS.

Nine 3-inch Thimble-Skein Taylor Wagons; tire 1 $\frac{1}{4}$ x $\frac{5}{8}$ inches; guaranteed capacity 3,000 pounds. Regular price \$60.00. Our price complete with body and spring seat.....\$45.00 Gear only.....\$36.00

Twenty-three Russell 2 $\frac{3}{4}$ -inch Thimble-Skein Wagons; 1 $\frac{1}{4}$ x 7-16-inch tire; capacity 2,500 pounds. Regular \$55.00 grade. Our price, complete with body and spring seat.....\$44.00 Gear only.....\$38.00

The above wagons were made by C. H. Russell & Son, Clarksville, Va., and are their standard wagons.

HEAVY THREE OR FOUR-HORSE FARM WAGONS.

Five 1 $\frac{3}{4}$ -inch Steel Axle Taylor Wagons; tires 3 $\frac{3}{4}$ x $\frac{1}{2}$ -inch; guaranteed capacity 4,500 pounds; weight 1,000 pounds. Regular \$75.00 grade. Our price.....\$55.00 Price of gear only.....\$47.00

TWO SEAT RIGS.

Twelve Dayton Wagons With Canopy Top; two seats, both removable; 1-inch tread; axles 11-16 steel; oil tempered elliptic springs; drop end gate; leather trimmings, either with black body and gear or finished in natural wood throughout. Former price was \$75.00. Now.....\$56.00

TERMS.

All prices are based on cash with the order, but if any one will deposit the amount of his purchase with his bank and they will write us he has done this, we will ship the goods C. O. D., subject to his examination before paying a cent on them. MOREOVER, WE BIND OURSELVES TO TAKE BACK ANYTHING NOT SATISFACTORY AND TO AT ONCE REFUND PRICE AND ALL TRANSPORTATION CHARGES PAID. All goods will be shipped from Richmond, and the samples of this stock can be seen at our warehouse. We, of course, reserve the privilege of withdrawing these prices as soon as this particular stock is exhausted.

SPOTLESS CO., INC.,

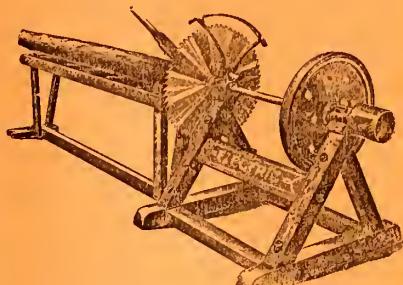
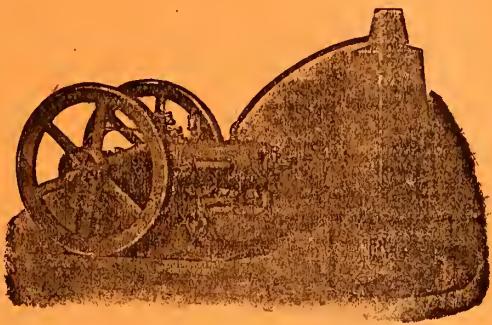
122 SHOCKOE
SQUARE

RICHMOND, VA.

Improved Implements for 1908.

THE WATT PLOW CO., Richmond, Va.

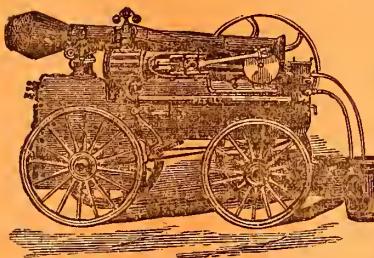
Root & Vandervoort
Gasoline Engines.
From 2 to 25 Horse
Power. Vertical or
Horizontal. Write
for special circular
telling of their
many good points.



Smalley Electric Pole Saw,
equally adapted for sawing cord
wood and poles up to 16 feet in
length.

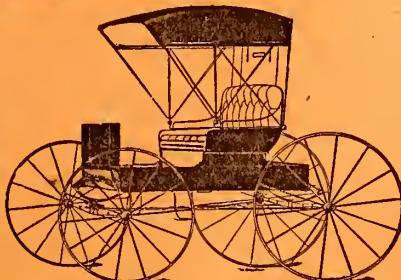


Smith's Stump
Puller is sim-
plest and best
stump puller
ever made.

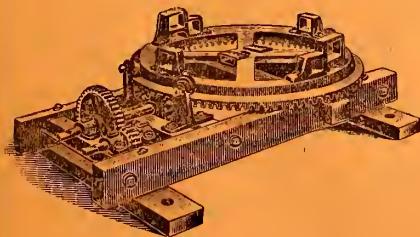
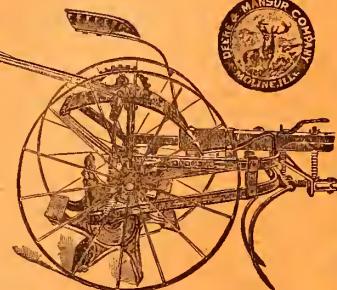


The Cele-
brated Geiser
Engine. Fur-
nished in any
size from 4 to
35 Horse Pow-
er.

We have the
largest and most
complete stock of
vehicles in the
South. We are
agents for the
Columbus Buggy
Co., and A.
Wrenn & Sons.



The John
Deere Stalk
Cutter has a
steel frame
and is very
strong.



Horse
Powers for
2 or 4
Horses.



Success Ma-
nure Spreader.
Thoroughly up
to date.

THE WATT PLOW CO.

{ 1426 EAST MAIN ST.,
1436 EAST FRANKLIN ST.,
RICHMOND, VA.

We invite your Correspondence.

Northwestern Mutual Life Insurance Company

THE NORTHWESTERN—The Company that in 1906 paid the largest amount of dividends ever paid in one year by any Life Insurance Company.

THE NORTHWESTERN—A Company which paid approximately as much in dividends as for death losses in 1906—a record in Life Insurance not equalled by any other Company of any age or prominence.

T. ARCHIBALD CARY,

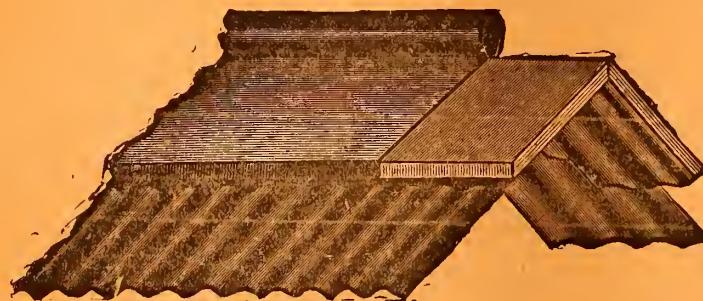
General Agent for Virginia and North Carolina.

601 Mutual Assurance Society Building,

RICHMOND, VA.

Agents wanted in unoccupied territory.

— Corrugated V-Crimp Roofing —



painted and galvanized.

“Bestoid” Rubber Roofing,
Carey’s Magnesia Cement Roofing

Tarred Paper, Tin Plate, Lime,
Cement, Hardware, Terra Cotta
Pipe, Wire Fence, Drain Tile, etc.

SEND FOR CATALOGUE.

BALDWIN & BROWN,

1557 E. MAIN ST., RICHMOND, VA.

THE EVERLASTING TUBULAR STEEL PLOW DOUBLETREES.
Guaranteed not to Break or Bend.  Send for Our Number 8 Catalogue

Furnished with Hook or Ring for Plow Muzzle,
also Traces.

for 1908. Get acquainted with our complete line.
THEIR USE SPELLS ECONOMY.

We manufacture a
complete line of Dou-
bletrees, Singletrees,
and Neck Yokes of
every description.



Ask Your Dealer for
Them and Take no
Other.
This Pattern, No.
105, made in three
sizes.

Pittsburg Tubular Steel Whiffletree Company, Sole Manufacturers, Pittsburg, Pennsylvania.



LOCK UP YOUR LETTERS
THIS MAGNIFICENT
FREE Steel Safety Box
DOUBLY RE-ENFORCED.

A Private Place for Private Papers.
STRONG LOCK. INTRICATE KEY. LARGE and ROOMY.

Brilliant black, trimmed in maroon and gold. A luxury to any one. A necessity to every one. Contains safe as a buried treasure. We will give you this splendid Steel Safety Box absolutely free and send it prepaid to any address for selling 20 packages of our IVORY WHITE BABY CREAM at 10 cents each. We send the goods prepaid, trust you with them until sold, and send you the Safety Box the very day we receive your remittance.

The Baby Cream sells on sight. Keeps children's skin perfect. Cures every trouble. Gives instant relief. Elegantly perfumed. Delicately medicated. Antiseptic. Snow white. Ladies use it on themselves. Keeps their skin like velvet. Circulars tell all about it.

Write at once and earn this elegant Safety Box.

BRAUER CHEMICAL CO.,

426 Postal Building, N. Y.